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The Accurate Armour M10

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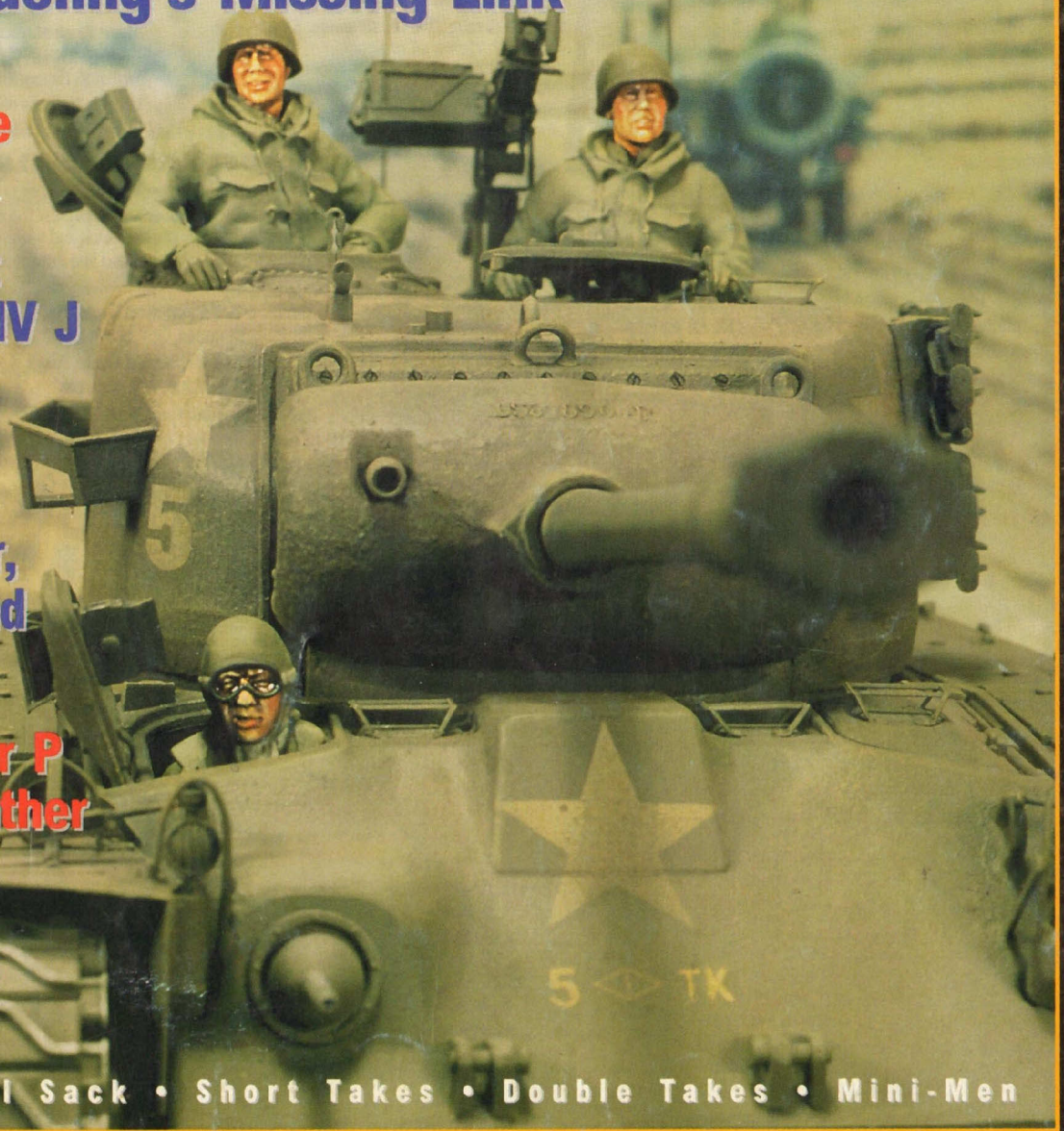

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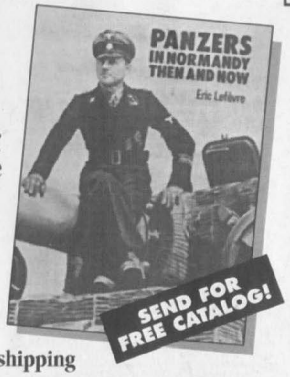

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CONTENTS

In Review

Congratulations! It's a 90,000 Pound Pershing! 20
Reviewing and discussing the hot new DML kit.

Construct a Destroyer 24
Reviewing the Accurate Armour M10 kit.

The Story of Long Tom 28
We look at the cool new AFV Club kit—reference photos too.

Purty Little Panzer 32
Building and painting Tamiya's newly tooled Panzer IV J.

Pygmy Panzer 36
A short look at the short new DML Hetzer kit.

Sturmgebuildit 38
A review of both the new Sturmgeschutze B and F kits from DML.

Features

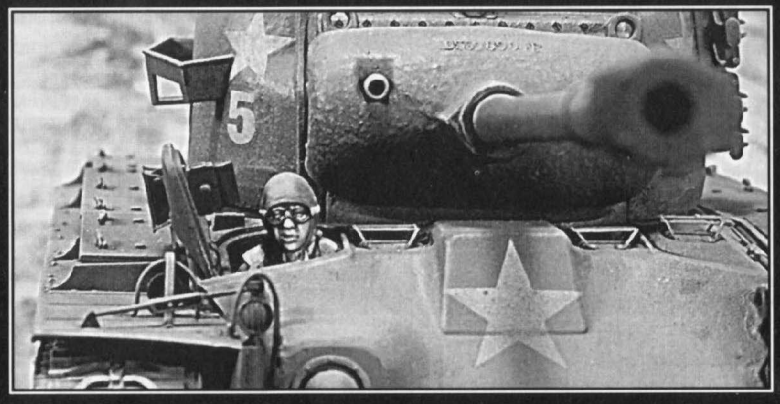
The Mail Bag 3
The readers speak.

Short Takes 5
A quick look at what's new on video, in print, in plastic, and general other stuff for the Military Minded.

Double Takes 12
Mini reviews of new versions of previous releases. This time it's the Brümmbar from DML, the Tiger P and the JagdPanther, both from Testor/Italeri.

The Sherman: A Fragmented Look 15
The first of a four-part series looking at the details of the U.S. Sherman tank.

Mini-Men 46
A peek at what's new on the figure front.



ON THE COVER:

Look out! Here comes the DML Pershing. Pretty exciting stuff. The jarheads in the turret are a mix of the old VP Universal Soldier and Hornet heads. The driver is from the original VP U.S. tank crew. And no, it's not a British Pershing, the M26 had dual controls permitting either left or right hand drive.

The complete review begins on page 20.

The back drop is the real thing; Korea, November 1950. Photo courtesy of Lt. Col. Robert L. Harlem (RET).

From Your Editor

I Really Start To Blather

I'm fortunate to have this space available to pretty much gripe and bitch about whatever I want. It's not like I've got a lot to complain about. I think we have it pretty good in the hobby right now. There are more kits than ever before. Stuff we only dreamed of having—even two years ago—is now available. Prices are way up, I agree, but I think overall we still have it better than our pals in the R/C and Model Railroad hobbies.

So I would like to pose an extremely dicey question: are our events and shows keeping pace with the growing hobby? Now before I start complaining, let me say this: I have the utmost respect and admiration for those individuals who put countless hours into actually pulling off a major show or event. All are volunteers and contribute their time out of pure love for the hobby (or masochism). My blatherings are not directed at them. And when I say we, I mean folks who build armor and figures, but also airplanes, ships, cars and sci-fi. The plastics hobby as a whole.

What I'm pondering is, do we take a close enough look at where, why and when we have these events? I've been to a fair amount of these over the years and I've found that the ones that everyone enjoys the most always have the same elements. The first, of course, is location. Now, everybody likes it when a major show is nearby. These particular guys are guaranteed a good time and in my warped little view, they don't figure in. Now, now, don't get steamed. It's just that if this event happens in your back yard, or you're involved in its production, you are going to have fun.

But in my humble opinion, our hobby thrives due to its ability to attract a national audience. This means more folks enjoying the hobby, building models and **buying stuff**. Yes, there's that old bugaboo: money. National events need to make dough. This potential is what attracts vendors, modelers & entrants and makes a show a success.

What some organizers fail to remember is that most of our modeling brethren have families. This means at least a wife, if not wee 'uns as well. I think most of you out there recognize the eye-roll or the long groan as specific signs of family enthusiasm when mentioning attending a show. The best IPMS Nationals in recent memory were those that provided opportunities for families to enjoy themselves. These were San Diego, Washington D.C. and Atlanta (one of the biggest ever). These locations provided lots of potential family fun, in addition to the hobby activities. By real fun, I mean activities not specifically related to the hobby. My wife (and probably yours) doesn't get too excited about a trip to the tank park or the Air Force base...

Washington was also the location of the recent World Show. For those of you not familiar with this event, it was sort of the Mother of All Figure and Armor Shows. Everybody came away loving this thing, vendors, modelers and manufacturers. It was so much fun that the next one won't be held again in the U.S. for several years. Go figure.

Why is another good question. Sometimes it's an annual event, like the IPMS Nationals. This is always held annually and it encompasses all modelers. Other groups have elected to have large regional events. SCAMMS is one of these and their shows have a great reputation. The old AMM Shows developed quite a following after a few years too. It could be that many of these smaller shows are a result of the larger events not meeting the specific needs of those individual groups. I think it was the combination of all these smaller regional events that made the World Show such hit.

"So, Pat, quit your bellyaching and tell us what you really mean." O.K. What I'm proposing is this: Let's have a fantastic show every year (or so), in a great location and let's make sure everyone, including the family, has a great time. Sound impossible? Not really. We control the organizations we belong to, right? If we want the shows to reflect our lifestyles and the hobby in general, all we have to do is say so.

I'm suggesting a Super Show be held every two or three years. This show could encompass more than one organization. Say IPMS, SCAMMS, AMPS, AMA and figure groups like the Atlanta and the Chicago societies got together in one big show. Boy, I'd travel to see that, wouldn't you? It could be held in some central U.S. location, well-known for conventions and other recreational activities. Somewhere like Chicago or Kansas City. Anywhere central, where good transportation hubs are located. This way almost everyone has to travel. And since it's only every two or three years, the distance won't seem so bad. But the location would always be the same, year after year. Hotels dig this. They always know you're coming. This translates into better room and convention facility rates.

The summer is the natural time frame. This provides the most non-hobby activities in the Northern climes. It's also baseball season and the above mentioned cities all have good teams, as do many other in the central U.S. (it's a thought, anyway)

Smaller, Mini-Nationals could be held annually, one on the west coast and one on the east coast. This could be held in the winter or summer and could involve just one organization (like IPMS), or all those on that coast (which would really be cool). Their location could shift around, or also be just in one consistent location, like the Super Show. This further decreases the travel burden and may actually attract more individuals to each show, due to the fact that most could travel the distances by car. The guys from the central U.S. would have the farthest to drive, but they'd have the Super Show locale to even things out.

The core of this idea is that it takes all the great aspects of the smaller and the larger shows and it rolls them into one. By the way, manufacturers love this kind of stuff. They love to know where we all are and what we want. The Chicago RCHTA trade show (held in the same place each year) attracts all of the plastic companies even though it's primarily an R/C organization. This is because it gives them a chance to see the industry as a whole and all at once. I think Super Shows could very quickly attract the support of many different companies.

Am I dreaming? Naive? Maybe. But it is our hobby. The possibility exists that we can have a Super Show every time. All we have to do is want it. We control the hobby (as consumers) and its organizations (as members), not the other way around. Organizers may groan while reading this, but guess what? They are the other big winners in this scheme. The more people that turn out, the more vendors that show up and the more models that get entered—the more dollars they take in. And as non-profit companies, this means more coins in the coffers, for next year's show and to **make the organization better for its members**. The idea should be to attract the biggest amount of people from all aspects of the hobby.

That's my piece. Let me know what you think. Is this nutty or is it not?

We Gain Weight, You Squint

If you're a regular reader, you'll notice a few changes. We promised a fatter book and this volume sees the start of it. In order to do this, we tweeked a few things. The first was the type size. In order to keep the same number of photos per article and more or less the same content, the actual size of the letters got smaller. We checked out lots of other publications and it's still no smaller than most commonly seen on the newsstands, or in the hobby (except this editorial). We apologize to those of you who's arms have gradually gotten shorter.

We have also altered the format somewhat on the reviews. We have tried to make them a bit more to the point, without making them any less thorough. We hope this all works, but by all means, we'd like your feedback as we go along. It's a good chance we'll go another eight the next time around.

Another new feature is part one of a series specifically devoted to researching, rather than reviewing, a model. We picked the Sherman for the first one and the series looks at the tank from a modeler's point of view. We're looking for feedback on this too, so don't be shy.

You will also notice the enclosed survey. We're trying to get handle on who you all are out there. Do us a favor and fill it out. There's something in it for you (potentially). We'll draw respondents from a hat to receive three different prizes.

So get to it. Please turn the page.

Pat Stansell
Publisher

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Buyer Talk

I do hope you'll accept a letter to the editor electronically. I want to start by congratulating you guys on your first full year. You have an excellent magazine that really fills a gap that has been around too long. My only suggestion for change would be to go to six issues a year, since there are so many armor releases coming out these days.

On the Sturmtiger, I would like to point out that Waffen Arsenal did a book that covers the Sturmtiger (along with the Elefant and Jadgtiger), volume 99 in their series, reprinted in English by Schiffer Publishing, I believe. The book, "Tiger in Action" by Bruce Culver, published by Squadron/Signal (catalog number 2027) also has some coverage of the Sturmtiger.

Lastly, let me point out that On The Mark Models not only has a brass set to detail the Tiger I chassis, as used in the article, but also has a separate smaller set with parts specific to the Sturmtiger, including rifling for the barrel.

And to close, I would like to say something about the person who questioned your apparent favoritism towards DML in choosing review subjects, and your remark about DML's feelings of being treated unfairly. Consider this part an open statement to all manufacturers, and DML in particular:

Having talked to several people at several publications, I have been repeatedly told the same thing: you review what is available. In some cases, that's governed by what is donated for review. In other cases, review copies are purchased. But it still has to be available.

When you look at DML's and Tamiya's release schedule compared to others (even Italeri), it becomes clear that even if subjects were picked randomly from the pool of newly-available kits, DML would have the most representation, with Tamiya hot on their heels.

And as for DML feeling that they have not been treated fairly, I can only say that they should look again. No review in MMiR has said anything about a kit that was not based on the experiences of a person actually opening the box, clipping off the parts, and building the model. In fact, it seems that DML reviews are generally very good, leading the consumer (me) to believe that DML products are a good investment of my modeling dollar. Maybe that's why I have so many DML boxes on my shelf, waiting patiently to be built.

I think that when an unfavorable review does come, directed at anyone, not just DML, that the target of that review should look at the kit and see if what the reviewer said was true: do those parts not fit? Is there an accuracy problem, particularly where ample references were available? Magazines such as MMiR and others that specialize in kit reviews are doing modelers the greatest of boons by letting us know before we spend $30, $40, or even $50, whether the kit is worth the plastic it is cast in. So far, DML kits are worth that, and much of that confidence on my part as a buyer comes from reviews.

—Randy J. Ray

Thanks for the nod in our direction. DML's trepidation regarding our reviews appears to be easing. Perhaps their hesitation was due to our "youth." Now that we have a few issues behind us, DML, and quite a few other manufacturers are becoming more responsive.

DML's place in the market is assured, regardless of what any publication writes about them. They are beginning to make inroads into the Chinese market (1.2 billion and counting), so they could be a presence for many, many years to come. And this year should be a particularly exciting one for them, with literally dozens of new kits on the horizon.

✉

Price Wars, The Really Final Chapter

The number one reason for higher prices of resin kits is labor. 90% of all resin companies are small one or two-man operations and casting resin parts and kits is a very time consuming process.

By most methods it's done by hand, which means we can only do between 5 and 10 kits an hour, compared to 100 to 150 an hour for injection-molded plastic. This doesn't even include the time it takes to research and build the masters.

The number two reason is cost of materials. Molds for resin kits for the most part are made out of RTV rubber, which sells anywhere from $7.00 to $20 a pound depending on who you get it from. You only get between 30 to 45 runs on average from a rubber mold, compared to 150,000 to 200,000 runs from a good injection mold.

I've talked to some plastic model companies in Japan and they tell me it cost between $750,000 to $1,000,000 to cut molds for just one kit—so they'd better get high runs from them. This may be one of the reasons for the $53 Panthers. You pay for quality, workmanship and of course, the Yen.

One advantage U.S. resin companies have over their European counterparts is our resin. We pay about 75% less for our resin here. Because it's a petroleum based product, the price is somewhat reflected at the pump. Ever try to buy gas in Europe? Its about $4.00 a gallon or more! Our resin formulation technology is more advanced and allows companies in the U.S. to buy synthetic resin instead of the smelly diesel fuel-based stuff.

I could write a book on all the different aspects of why resin costs are so different from company to company. One of the biggest reasons, in my opinion, is the owner's ego. Some companies think their stuff is gold and they try to charge like it. The bottom line is: what are you willing to pay for an item that no one else makes? Companies need to keep in mind that modelers pockets do have bottoms and if they don't watch it, they will price themselves right out of the market.

—Bill DeBekker
Panzer Concepts

I wanted to drop you a line to add to the dialog in your discussion of kit pricing. One aspect typically overlooked is the value of the dollar against most of the major foreign currencies.

When the armor and figure hobby first began it's resurgence in the late eighties and early nineties, the dollar was doing fairly well abroad. For example, in 1992, one dollar bought 360 yen and about 4 German Marks. Right now the dollar buys only 92 yen and roughly 1.8 Marks. It's a similar story with both the French and Belgian franc.

It's easy to see how the price of imported products has increased over the last five years. Many of us became acquainted with the hobby in its earlier stages, so the gradual increase in prices naturally came as somewhat of a shock.

Of course, many of the products we've enjoyed in that same time frame have been from overseas and that may be a relatively unique experience for consumers in the U.S. who generally tend to "Buy American."

—James Dunbar

Hmmm... interesting. What's everybody think?

✉

Book 'em Steno

I think you have a great magazine here, especially the figure reviews, I also enjoyed the Sturmtiger review and the two Panthers.

But I do have one small quibble. In your review of the DML Red Devils/Arnhem, the author states that: "There's really nothing that nails them down as Arnhem paras. You could easily use them in a Normandy dio." It also says: "the Sten gun was the standard British submachine gun for the war." I disagree. The Sten included in the set is a Mark V type, which was introduced in 1944 after Normandy and stayed with the British until the 1960s. For a Normandy diorama, you would need to provide a Sten Mk II or III. The Sten in any variant was never adopted by the British Army, but the Mk II version was very popular with the Resistance, the British Paras and the British Commandos. I have enclosed an article on the Sten taken from the *Arms and Armor of the 20th Century* series.

But despite this error, I still adore your magazine, the armor reviews are splendid. Keep up the good work!.

—Clayton Cameron

We'll go along with that. The Mark V was indeed not issued at the time of the Normandy landings. The Mark V was almost a completely different weapon than the earlier models. It had a wooden, rather than a metal stock with front and rear hand grips as well.

A Mark II and III Sten gun may be part of DML's upcoming WWII Allied Infantry Weapons set. This would appropriately back-date the figure.

The Brits never did officially adopt a sub-machine gun during the war. They relied on our Thompson and their own efforts with the Sten. Even though the Sten was made in five different models, the series was as close as the Brits came to adopting a "standard" sub-machine gun.

✉

Got a problem with any of this?

Well write to us, dammit! Send those comments to: *Mail Sack, Military Miniatures in Review, 21045 Commercial Trail, Boca Raton, Florida 33486-1006, or discuss complaints, problems, wisecracks, etc. via the Internet. Find us at the handle:* ***MMiR35701@aol.comm***

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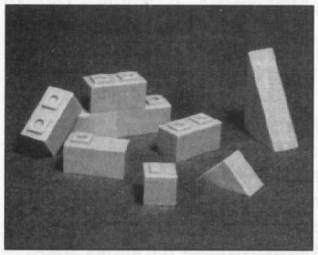

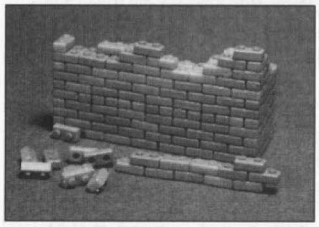

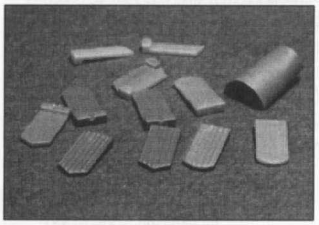

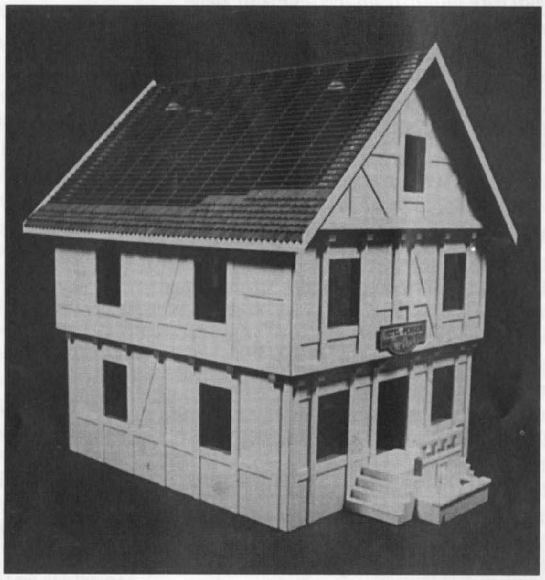

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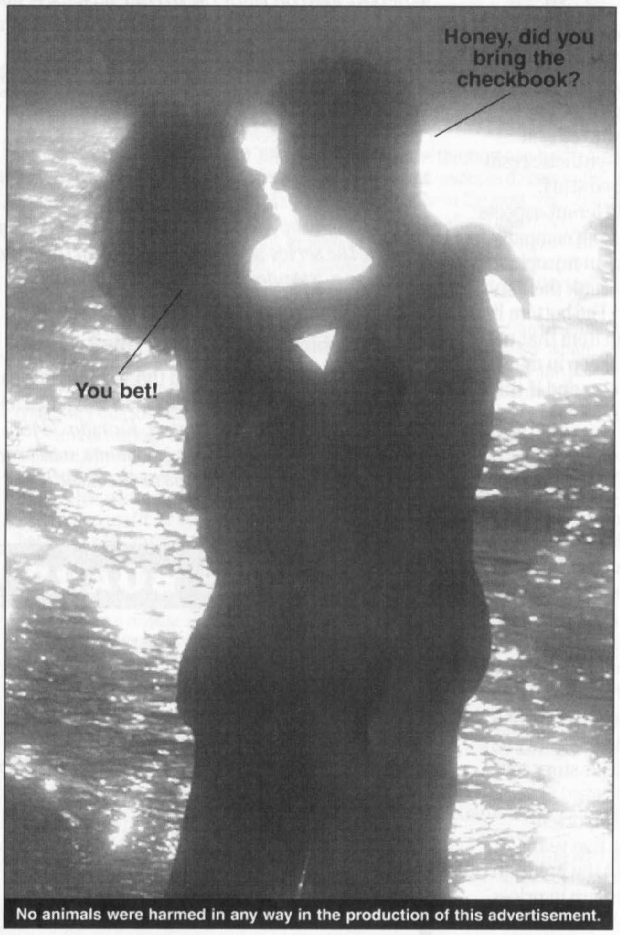

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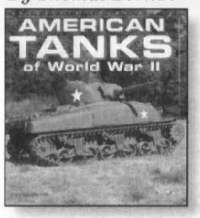
Short Takes:

The Year in Preview

We look at books, new products, old products, the year that was and the year to come!

Book Reviews

American Tanks of World War II
Enthusiast Color Series
By Thomas Berndt



Motorbooks International
Softcover, 96 pages, full color throughout.

THIS IS ANOTHER IS A SERIES OF surprisingly good books which keep popping up from Motor Books. The real surprising thing is that we keep discovering them at a large book store chains. It's not often that you find books worth taking home at these joints.

This book is a brief history of U.S. Armor told through photos of contemporary, restored vehicles. Text accompanies the photos and gives a short description of the development and deployment of each vehicle. The book starts out with the White Scout Car and runs through the M3/M2 halftrack series, the M20/M8 armored cars and on into the light tanks, the Sherman and the Pershing. The photos are all taken at vehicle rallies, museums or at private collections.

There's some real beauties in here. The book illustrates well the loving care that is lavished on a fully restored historical vehicle. Among the many gems pictured are an M18 Hellcat, an M19A1 Motor carriage, an M39 Utility (a de-fanged Hellcat) and a pair of shiny new-looking Pershings. One of which is stated to be from the original group sent to Europe in 1945. It is described as having fought at the Remagen bridge. This would make it one of the five which served with A Company of the 14th Tank Battalion. They were supporting the 27th Armored Infantry Regiment on the morning of March the 7th when the bridge was discovered intact. Amazingly, this vehicle is in pristine condition and it is now on display at the Wright Armor Museum. It would be interesting to know how it made it back to the U.S.

Although the text is brief, you will want to have this book just for the excellent color photos. It's reasonably priced at $12.95. If Motorbooks are unavailable at your local book monger, try calling 1-800-826-6600. Motorbooks can help you in finding a local outlet or assist you through their vast retail mail order operation.

The M4 Sherman at War
The European Theatre 1942-1945.
Armor At War Series #7001
By Steven J. Zaloga
Concord Publications Co.
Softcover, 72 pages, B&W with color illustrations.

THIS NICE PAPERBACK BOOK IS A pictorial essay of the Sherman tank in use in the U.S Army in Europe. In spite of the title, the M4 in foreign service is barely covered, but that's not a bad thing because there are many books on the Sherman that do the Brits and others proud. The American use of the M4 series of tanks has not been seen as much, so this book's slant is good.

In addition, for your money you get slightly more than 70 pages, most covered with 3 or 4 black and white photographs, a center section of color side views of various tanks and an interesting tactical opinion by the author. We found the latter to be a good read even though we disagree on a number of points made. The author enumerates the tank's weaknesses and relates the bad points in its history. He backs these up with tanker interview material and then goes on to trash the people behind the Sherman for not building the T-34 instead. The author's well known bias for things Soviet may be showing a bit.

Having said that, we think Mr. Zaloga's latest effort on the Sherman is a good one to have on the shelf, it both entertains and provides lots of good photography to peruse and you don't have to worry about dropping your copy of Hunnicutt on your next Sherman model! We liked the photos chosen and enjoyed seeing a bunch of new shots from units operating in Southern France and Germany instead of just another rehash of the Normandy-to-the-Rhine stuff. The color plates are nicely drawn too. Good job, so let's hope we see a British Sherman book to go with this one.

Available wherever Concord Publications are sold.

D-Day Tank Warfare
Armored Combat In The Normandy Campaign
June-August 1944
Armor At War Series #7001
By Steven J. Zaloga and George Balin
Concord Publications Co.
Softcover, 72 pages, B&W with color illustrations.

THIS IS THE SECOND BOOK FROM Concord's new series, and like the M4 Sherman book it's about 72 pages long with multiple black and white photos on most pages. There is a center section of color vehicle side views, and a short bit of text resides up front. Although covering such a short time frame, essentially one battle, this book packs a lot of interesting views of German, U.S., and Allied vehicles.

Everything from Schleppers to Defrocked Priests are in here, but German armor buffs will have to be satisfied with the Wehrmacht's less famous stuff. Some of the more familiar German tanks didn't make it to Normandy in great numbers, so the book keeps that balance, as it should.

The authors have achieved a neat mix of stuff and we liked the wide variety of unusual or rarely seen vehicles shown. Perhaps the best way to sum this aspect up is to relate what happened at a recent club meeting. Just about everybody (except Wolfgang, the Leopard II freak) looked at DDTW and all were seen to be oohing and aahing at some page or another. The phrase, "here's the photo I was looking for..." or "gee, wish I had this when I built my..." was often heard. Zaloga and Balin's good work meant we got our copy back with dog ears and a vicious crease in the binding. Unless your name is Wolfgang, put this one on your bookshelf.

Available wherever Concord Publications are sold.

Hummer Humvee in Action
Armor Number 32
by Jim Mesko
Squadron Signal Publications
Softcover, B&W photos with color illustrations, 50 pages.

THE LATEST IN THE 'IN Action' series covers the ubiquitous Humvee utility vehicle. The book contains the whole story, and Mr. Mesko does his usual capable job of researching and writing. The selection of photos is especially good, covering all (and we mean all) of the variants including the new civilian HUMMERS and the soon-to-be (maybe) Humvee trucks. The photos also reflect Squadron's recent trend of showing more close-up shots. These kinds of detail shots being much more useful than the wide screen versions...

As in previous volumes, a variety of line drawings are provided. Most show the different models in profile, but some are detailed illustrations of various parts of the vehicle.

One small nit-pick is that the illustrations don't quite measure up to previous Squadron quality. This is a small point at best and we don't think the drawings are any less useful. Something only a bunch of graphic artists would notice!

This one's going to be popular, as it just about stands alone out there. Up until now there's been no good single reference on the subject. $8.95, wherever Squadron Signal Books are found

New Products

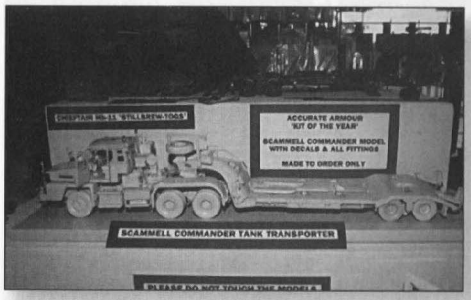
Editor's Note: some prices in this report are given in British pounds as well as other European currencies. Currently the pound is equal to about $1.60 U.S. If you want the precise daily rates, check the "Foreign Exchange" in the business section of your local newspaper.

Telephone numbers are also given for European

sources. Check the country codes with the phone company for direct dialing. Also take into account that the UK is 5 hours ahead of EST. Try calling first thing in the AM.

Accurate Armour

Has a number of interesting new releases among which are: a **Scammell Commander Tank Transporter.** This is a massive, highly detailed model of the modern machine. These are only built to order and the price of £235.00 was pretty reasonable taking into account the splendid detailing and the price of some similar kits which cost much, much more.



Another new release was the **Tiger Elephant Recovery Vehicle.** Due soon was the **Challenger II,** Price TBA. Also look for the **Churchill AVRE Sledge,** the **Pearson Combat Bulldozer,** and the **Staghound Armored Car,** right about now.

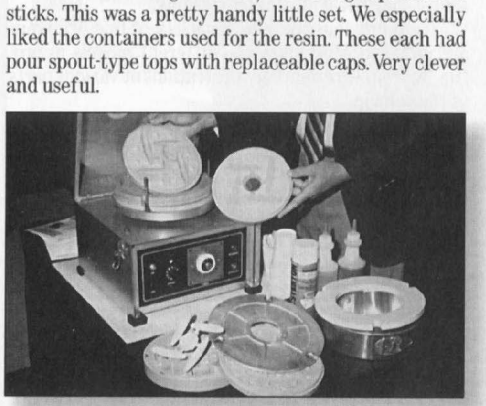
If you build 1:35th scale British armor you can't beat this company for quality and fairness.You could go so far as to equate their name with quality production. Order via specialized U.S Distributors, such as The Red Lancers or direct: Accurate Armour Unit 16, Ardgowan St. Industrial Estate, Port Glasgow PAI4 SDG Scotland UK. Tel.47-574-3955

Alumilite Corporation

Along with all the various model manufacturers in Chicago, this year we took the opportunity to touch base with a few of the non-model related companies. One of these is Alumilite. If you're not familiar with them, they market and manufacture an entire line of casting products aimed specifically at the hobbyist.

Their core product is the **Alumilite Super Casting Plastic.** This is a tan-colored, two-part resin that cures in about three minutes. This one product is supported by an impressive array of other casting items that make Alumilite your "one-stop-shop" for all your mold-making needs.

We received a sample kit of the product which included 28 oz. of both A and B resins; one pound of RTV rubber molding material; measuring cups and stir sticks. This was a pretty handy little set. We especially liked the containers used for the resin. These each had pour spout-type tops with replaceable caps. Very clever and useful.



Also enclosed in the kit was a very informative booklet of casting tips and techniques. The booklet contains comprehensive descriptions of mold-making, mixing RTV and resin, and includes both product descriptions and specifications. AND this entire package is only fifty-eight bucks. An excellent value.

The Alumilite price list and catalog contains a number of other products such as dyes, RTVs, Modeling Clay (for mold-making), fillers, glues and equipment. The equipment listed includes both a vacuum pump and a chamber. These items are priced separately at $495.00 and $132.00 respectively.

The final product in the catalog, and a new one for Alumilite, is **The Spincaster.** This is a table-top unit that can be used to mass-produce resin and low temperature metal items. The unit is a high-quality industrial strength machine and we had a chance to see it in action in Chicago. Fairly substantial size parts can be rendered in it; up to 2" thick, 3" wide and 6" long. The Spincaster operates on standard 110 volt service. The unit comes with complete instructions and retails for $1,395.00.

Probably the best part about the folks at Alumilite is that they are extremely knowledgeable and helpful. They offer complete product support and are more than willing to answer questions regarding the proper use of their product in almost any of its many applications. They can be reached at: Alumilite Corporation, 225 Parsons Street, Kalamazoo, MI 49007. (616) 342-1259. Alumilite Corp. accepts MasterCard and VISA.

AFV Club

Not too big a year for this Taiwanese company. The big news this fall and winter was the 1/35th scale **Long Tom.** It's the long-barreled version—official designation: M59 Long Tom 155mm Cannon. Number 3509, $35.98 retail.

We'd hoped to see more of AFV Club in 1995. The Long Tom is available now, so maybe we'll see at least one or two more things from them in '95. We're wishing for the 203mm short version of the Long Tom, too. We saw flyer of AFV Club's that pictured a number of interesting goodies, some of them perhaps for this year.

Illustrated were a Fuchs modern German APC; an AIFV YPR-765 Fighting Vehicle (the Bradley's younger brother); an M752 LANCE and a Minenwerfer Skorpion. This last item is a modern German mine laying vehicle based on the M113.

Shown in silhouette form were the Long Tom; the M40 SPG (basically a Long Tom riding a Sherman); a M-939A2 Big Foot Truck; a M-977 "Oshkosh" Heavy Truck and a LVTP-5 (the big Vietnam-era amphibious APC). We're not sure what will eventually make it to the shelves. This may just be their own version of a Wish List.

These guys really do a great job, the molding and execution of their kits is first rate, so we're keeping our fingers crossed.

One new item we know for sure about is the **M88.** That's M88 as in no "A1." This will be the earlier Vietnam vintage version available sometime this spring. This is number 3511 and it will retail for $47.98.

We've had a chance to look at one other new item that sort of snuck up on us. This is AFV Club Kit #AF3510 **M60 & M48 Track (workable).**

This is the second set of Patton tracks released by these guys and like the first they are very good.

This kit features the T142 double-pin track links with separate end connectors that actually work. The only difference from set #3505 is that these have the octagonal track pads now in widespread use on most Pattons instead of the traditional chevron pads. This is the reason why we're giving you this intel. We didn't even know they'd been released. Most folks we talked to, even some hobby shops, weren't aware there were two versions.

These links are highly recommended to our readers. The quality of engineering provided at a reasonable price, the numerous extra links given (even if used on the same company's M88A1 kit), and the look imparted to your Patton justifies our stamp of approval. Dear AfvC: we'd love to see some Pershing/Sherman tracks done this way, wouldn't you?

Azimut Productions

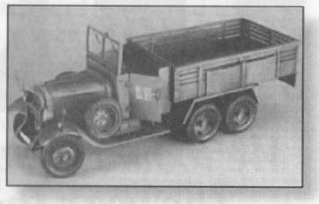
Lots of new junk from Azimut. In no particular order are a **U.S. GMC Dumping Bed,** 35156. This is a resin conversion for the Italeri or the Heller deuce and a half truck. Price TBA.

A really cool looking **Chevrolet 1.5 Panel Truck** is available. This is a panel truck based on the 1.5 chassis and configured as a radio truck in the model. One of the more unusual soft skins in the U.S. livery. Number 35063, $105.98 retail.

A very nice **Mercedes G3A Cargo truck** (35058) is made up of resin white metal and photo-etched parts. Price $119.98.

Another full kit was the **BMW 315 Staff Car.** This is number 35070 and carries a retail of $77.98. This kit is also made up of resin, white metal and photo-etched parts.

The ADV line of figures has the following new additions: 296, **Smoking Civilian**; 295, **Young Woman**; and 297, **Grandpa.** These follow up several civilian releases from last year, which rounds out a nice selection of these items.



Our very favorite items seen from Azimut were two dry-transfer decal sheets; #35701 **German Divisional Insignia** and #35704 **German National Insignia.** Both sheets were simply phenomenal. Between the two sheets they cover almost every marking you could conceive for a German WWII vehicle. Both sheets contain five-colors and are beautifully registered. The National Insignia sheet, for instance, contains five types of vehicle numbers, including the large red and white numbers seen on Tunisian Tigers and the late-war blue and yellow numbers seen on Tiger IIs. Really nice stuff.

Both sheets are packed in re-sealable plastic bags and this greatly improves their shelf life. We have an earlier sheet of tactical markings that have kept fine since May of 1994.

Items from the Ironsides range are promoted along side the Azimut range. These items are produced by Azimut and usually contain a complete plastic kit in addition to resin, metal and photo etched parts.

Items from Ironsides this year include the **4.7cm Pak** on the Panzer I chassis (IR004). This was announced last year, but is just now becoming available. A **M67A2 Flame Thrower** will contain Minicraft kit with resin and metal bits. This kit also includes link-to-link tracks. No price or stock number.

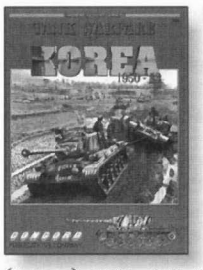
An **Infantrie Karren/Panzerjäger Trailer** set is composed of parts to make up two different trailers. One for gear and the other with the multiple Panzerscheck launchers. Number 010. Price TBA.

Finally, there is a souped-up version of the Heller R-35. This contains resin, white metal and photo-etched parts to make one of three versions of the tank in German service. One of the versions is the tractor-type used to tow the 15cm fieldgun. Interesting. The item is **PzKfw 35 R (f)** and is number IR017. Price TBA.

ADV/Azimut stuff can be hard to find in the U.S., although that situation is beginning to change bit by bit. If your local hobby shop does not stock them, ask them to contact The Right Stuff Distributors at 818-968-1333. Western Front Hobbies in California (909-861-6336) is one mail-order retail source we know of.

Concord

The next in the *Armor at War* series is *Tank Warfare in the Korean War* by (guess who?) Steve Zaloga and George Balin. We'd hate to have the



schedule of these two guys! The book will heavily emphasize the Pershing, which should be excellent. The Pershing being a bit shy in print to date. Look for number CP-7003 and a retail of $13.98. Not too shabby. Available right now.

This series will continue throughout the year with 7004, *Tank Battles of the Pacific* (Zaloga), 7005, *U.S. Tank Destroyers in Combat* (Zaloga) and 7006, *Panther*, by Thomas Anderson.

In addition to the current series of AAW books, Concord promises another new series entitled: *Fighting Men.* This will eventually be five to seven titles, with the first in the series being 6001, The *German Army, Blitzkrieg 1939-41.* By Gordon L. Rottman and Ron Volstad, the book will contain around 20 full-color plates of the subject supplemented with photos. This should be a good 'un.

No word on price or availability, but we'd guess under fifteen dollars.

Custom Dioramics

In addition to the new items seen in their current advertisement, Custom Dioramics is now offering a full color catalog. It's called **Battle Colors** and it features a magazine-style format with tips and techniques on assembling their line of ceramic building products.

It also features the work of four different diorama modelers who have utilized the Custom Dioramic line of products.

The whole piece works very well and comes highly recommended if dios are your bag (and even if they're not).

Available from Custom Dioramics, 95 Glenmoor Place, Winnipeg, Manitoba, Canada R2E 0G8. The price is $7.95 in the U.S.; $9.95 in Canada; £6.00 in the U.K. and 60ff in France.

DML

Boy! DML was definitely "Bell of the Ball" this year in Chicago and they continue to surprise.

The big news last fall was their now famous hat-trick of new items consisting of the **Pershing** (6801. $39.98), the **Early Hetzer** (6030, $26.98) and the **Stug III F** (6033. $29.98). These had everybody charged up and all were especially excited over the Pershing. That one was a true surprise. DML has amended it's "Secret Release" procedure. The above mentioned items were only "secret" for about a week, then current info was sent out in the form of press releases to coincide with the Chicago show. This the way to do this. Their previous practice of stringing us out for months on their upcoming products was annoying to say the least.

DML is now touting a whole line of Korean War products. Along with the Pershing and the **Chosin Marines** (6802, $6.98), there will be: **Chinese JSU-152 Howitzer** (6803, $29.98); **JS-II UZTM Production Type "Chinese Volunteer"** (6804, $32.98) and an **M46 Patton** (6805, price TBA). Most of the above should be available now, with the JS coming in April and the M-46 in May.

Add 6806, **Chinese Volunteers** to the line-up in May. These will be four figures in padded winter jackets.

Chinese JS's didn't see combat, but were used for propaganda purposes during the conflict. The 152 will be welcome none-the-less. This is the version with the unusual slotted muzzle brake. The JS-UZTM is a slightly different variant of the wartime tank, with an altered front end. The model is pictured with the big DSHKA turret-roof MG and that will be a welcome addition to the kit.

Other new items available now, are the **WWII Easy-Eight with the T-66 tracks** (9010, $34.98) and the separate set of **HVSS Suspension** (3814, $9.98).

For 1995, DML is whispering about a virtual deluge of armor kits. We heard about (maybe) a Churchill, Cromwell or a Firefly as the next round of "Secret Releases." We currently have the **Firefly** in our offices, number 6031. This is 90% new tooling—only the Italeri suspension is in the box. It will retail for $34.98.

Following on the heels of the Firefly will be the highly logical **M4A4 Sherman.** It uses different turret and other bits. Number 6035, $32.98.

6032 is the **T26E3** version of the Pershing. This is the WWII variant, with the T-66 tracks. It will retail for $39.98. Available now.

To keep your early Hetzer company, is a **Jadgpanzer/Flammpanzer 38 (Mid-Production).** We think this will include the flame-thrower parts as an option. Either way you get the later variant. Number 6037, price TBA.

We've also gotten word on the **Flakpanzer IV (3cm) Kügelblitz** and the **Sturmgeschutz IV (late).** Numbers 6040 and 6042 respectively. DML continues to get good mileage on its Panzer IV chassis. Release dates and prices TBA.

Depending on who you talk to, DML may release up to 24 new armor items this upcoming year. We're a teeny bit skeptical that the market could absorb this much stuff, but we'll be more than happy to try to tread water for a while—there are worse dilemmas than having every armor kit we've ever wanted!

Tons more figures are on the way. A **Stug Crew** for the various Stug kits is among these. This is number 6029 and will retail for $7.98. Available now.

An unusual subject will be **Japanese Infantry, Iwo Jima '45.** This is number 6044, $7.98.

German Tank Hunters, will be a set of figures based around Panzerfausts and Panzerschreck. Number 6034, $7.98 retail.

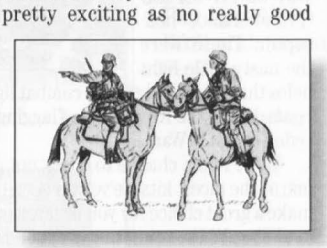
Herman Goering Division, Tunisia, will an interesting mix of Fallschirmjäger and SS uniforms. Number 6036, $7.50.

U.S. Marines will be depicted as they appeared in the last year of the war. Includes a flame-thrower. Also suitable (we think) for Korean War stuff. Number 6038, $7.50.

German Ski Troops will be three figures with skis and a fourth on snow shoes. All will be dressed in heavy winter clothing. Number 6039, price TBA.

German Gebrigsjäger (Caucasus 1942) will depict troops in all the mountain gear, including the heavy anorak, packs and knobbed boots. Number 6045, price TBA.

6046 will be **8th SS Cavalry Division "Florian Geyer."** This is pretty exciting as no really good mounted figures are currently available in 1/35th scale. The set will contain two mounted figures. Price TBA.



Rounding out the WWII list is a set of **Soviet Anti Tank Team** personnel. This will be two, two-man anti-tank teams, each armed with the Russian anti-tank rifle. Number 6049, price TBA.

The Vietnam series adds **Marine Recon** (3313) and **ARVN Rangers, Saigon** (3314). Release dates and prices on these are TBA.

Other "big" news in figures is DML's new series of 1/16th scale injection molded kits. The first blokes in the series will be: 1601, **German "Cross of Iron" Wehrmacht Unteroffizier, Eastern Front 1943**; 1602, **SS Stürmbannführer, Ardennes, 1944** and 1603, **Fallschirmjäger (Monte Cassino).**

All three should be available by May and will sell for $14.98, which is about half of what you'll pay for a comparable resin piece. Future releases will include: 1604, **SS Sturmann, Ardennes, 1944** and 1605, **Screaming Eagle, Normandy 1944.** All of these guys appear to be based on earlier 1/35th scale releases of the same subject.

DML plans a big houpla over their **Fiftieth Release; 6050.** There will be a promotional and/or subject tie-in with the fiftieth anniversary of the war's end. No word on the subject yet, but it will be kept a secret right up to its release. Word is, the subject will be fairly spectacular, not the mention BIG. Stay tuned to this channel...

Dutton Enterprises

Dutton's been around for a while. If you're not familiar with them, they manufacture an extensive line of 1/35th scale ceramic buildings. We first became acquainted with them at the AMM Show in 1991. What impressed us then was that many of the components were already colored and weathered. The coloring appears to be a dye of some sort, so it does not chip or crack. Most of their products are sold "whole" and not as ruins, although many are available with battle-damaged sections.

The line has grown over the years to include six complete row houses for use in urban dioramas. These are complete structures that are meant to used in conjunction with others in the line or another company's product. With the use of Dutton's vast selection of accessories, such as cobblestones, sidewalk sections, rubble and other goodies, one can create entire city scapes in 1/35th scale.

One other structure is offered, which is a village church ruin.

Many of the various components of each building are available as separate items, such as the titled roof sections. And like all the rubble, cobblestones, and bricks, these are pre-colored.

The entire line is extremely reasonable in price. Some items are almost dirt cheap. The row houses range in price from $29.95 to $34.95 and the church ruin sells for $36.95. The many different accessories range from $4.95 to $14.95, with 600+ hex-shaped cobblestones selling for $6.95.

The newest additions to the Dutton line are brick rubble with attached mortar. This product comes in red or gray, $8.95 per bag. Tile rubble with attached mortar is sold in red, gray, white or yellow. Also $8.95 per bag.

To get the complete picture, we highly recommend obtaining the Dutton price list and catalog—it's only one dollar. Contact Dutton Enterprises at P.O. Box 877, Oakhurst, CA 93644-0877. Or call (209) 683-6992.

Hasegawa

We were hoping for more from these guys this year. Everyone was fairly thrilled over last year's Kubelwagens.

So far for this year, we have the **IJA Type 97 Light Armored Car** in the Fine Molds range. This will be number FM05 and no retail is stated. We'd imagine it'll be up there. Probably in the eighty to one hundred dollar range.

A complete catalog of all Hasegawa products (expect Finemolds) is available from your local hobby shop for $8.00. It may also be ordered directly from the

U.S. importer of Hasegawa products: Marco Polo Imports, Inc. at 532 South Coralridge Place, City of Industry, CA 91746.

Hornet Models

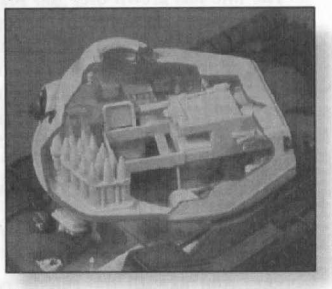
Look for the following new 1/35th scale figures in the Hornet range, available right about now: GH22 **German Tankman/Leather Overalls**; RH10 **Soviet Infantry-Riding Tank**; SC08, **Italian Infantry Officer, North Africa**; SC09 **Italian Engineer, North Africa** and WH04 **Polish Tank Officer, 1939**. Listed retail on these items is $15.98.

Look for two new head sets soon. These will be **UK Rimless Helmet**, HBH05 and **British Tank Crew, Berets,** HBH04. Three of the latter wear headphones. Both of these sets will be suitable for crewing up any Brit tank.

Jaguar

Jaguar is yet another new name on the scene. We don't know too much about them other than their product line–but it looks interesting. So here it is so far:

63501 is a **JS-2 Interior**. This will be for the DML kit and it will retail for $40.00. Available now. 63502 is **Panther zimmerit**. No specifics on the product, but the retail is $22.98. 63503 is set of **Russian 122mm ammo**. This will go nicely with the JS interior. $9.98. 63504 is a **Panther Interior**. For the Tamiya kit. $45.00. 63505 is **Brümmbar zimmerit**. For the DML kit. $25.98. 63506 is a **Panther 75mm ammo**. For the Tamiya kit. $9.98. 63001 is a two-figure set depicting a **Wounded Panzer Crew**. This will sell for $16.68.



61601 will be a 1/16th scale SdKfz. 222 armored car. It will be rendered in resin. Price is TBA.

Look for release dates through the spring on all these items.

Kirin

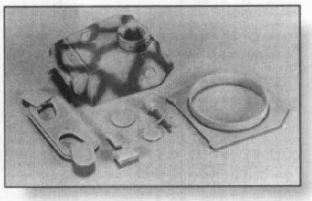
Kirin buzzes along with more goodies for 1995. Several new items were on display such as the new **ZSU-23 interior** set.

This is a great idea. One has to wonder what took them so long. The kit is composed of drop-in modules for the turret, driver's station and ammo bin. All in resin. The set is number 28520 and will retail for $24.98.

We're looking forward to another excellent figure from the talented hands of John Rosengrant. This will be a **Fallschirmjäger, 1944**. This is a really terrific looking hombre, modeled creeping cautiously around a corner. The item will be in the bigger 1/9th scale (200mm) and this really shows off all the exquisite details on this model. No word on a stock number or price. We're figuring around sixty dollars.

MB Models

"Just when I thought I was out, they pull me back in," Or so said Al Pacino in Godfather III. MB must have had something similar in mind when, after saying that we'd see no more armor stuff from them, we start seeing more armor stuff from them.



There are currently five new items in the line.

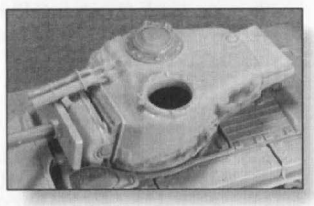
MB 1111 is a **Panther D** conversion for the Italeri Panther. It include a resin turret, hull hatches and other parts. $24.95.

MB 1114 is an update kit for the Italeri **Panther A**. It also contains a replacement turret, hatches and other parts. $24.95.

MB 1116 is a **Ersatz M10** conversion for the Tamiya Panther G. This represents the phony M10 the Germans used during the Battle of the Bulge. It comes with resin turret, bow armor, turret plates and a rear hull plate. All for $24.95.

MB 1117 is an **M45** turret for the new DML Pershing. This is the 105mm assault gun version that saw service in Korea. $17.95.

MB 1118 is another conversion for the DML Pershing, this time a **Super Pershing**. The kit features a new gun barrel, muzzle brake, T26E1 turret, counterweights and bow armor. $29.95.



We've received samples of all the above items and we are impressed. MB is now casting its turrets hollow. The Panther items were particularly good examples of this. These items both include fully detailed vision devices in the cupolas as well. The Pershing stuff is also quite nice. The casting quality on all the parts being first rate.

MB products are available directly from MB or at your favorite hobby shop.

MRC

MRC has wasted no time in preparing it's next 1/35th helicopter release. Following the UH-1 will be an OH-58D "Prime Chance" helicopter. These were the nasty little light helos that were designed to combat light Iranian speedboats during the Kuwaiti "Re-flagging" period that preceded the Gulf War.

We've had a chance to check out a test shot and its one of the nicest kits we've ever seen in plastic. It would make a great choice for you first foray into "air vehicle" modeling. We're estimating a summer release.

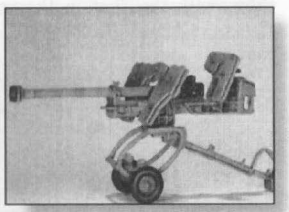
Military Model Distributors/ Squadron Signal

MMD is the wholesale arm of Squadron mail order. They were showing off a number of new imports this year. A whole bunch of interesting and unusual foreign items are listed.

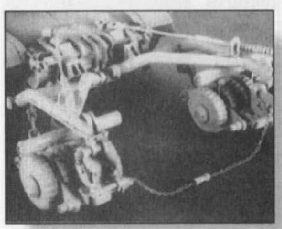
MMD will continue to represent Accurate Armour in the U.S. Many different items will be offered during the year. Check their latest flyer for the current selection.

Scale Model Accessories was another addition to their catalog. Squadron is stocking nearly one hundred products in the line. See elsewhere in this section for what's new from SMA.

Among the other foreign manufacturers represented are **Mini Art Studios.** They offer a nice little range of conversion and accessory products, such as the **German 10.5cm Recoilless Gun, U.S. 75mm Howitzer** and the **M1A1 Mine roller** set. We've seen a number of these items and they're all quite nice.



The list continues with many other names and products which are way too extensive to print in this space. Here's a few of the names: **Airwaves** (brass); **ALBY** (kits) ; **Artmi** (figures); **Czech Masters** (armor conversions); **Hinchcliffe** (artillery kits) and **Tauro** (figures and dio accessories). For a complete listing and description of all the products mentioned, write to: Squadron Signal Mail Order, 1115 Crowley Drive, Carrollton, TX 75011-5010 or call: (214) 242-1485.



Model Kasten

They're baaack! This infamous line of link-to-link tracks is now back in this country in numbers. Marco Polo Imports of California has restocked them, so your local hobbyshop should be able to obtain them through its favorite distributor. One retail outlet we know of is VLS mail order in St. Louis.

Believe it or not, the price has actually gone up (due to our friend: the Yen). Each set now retails for between $33.00 and $45.00 dollars. A couple of new items will be popping up, such as the **Early Tiger Road Wheels** (W01, $38.00) and **Opel Maultier Tracks** (K27, $33.00).

The line of workable tracks is now called "SK." The line now includes the following items: SK03, **Tiger I Transport**; SK06, **Tiger II**; SK07, **KV-I/JSII**; SK08, **ZSU-23/4**; SK09, **JS-2 Type A**; SK10, **Late Panther** and SK11, **T-72**. The SK series all retail for $73.25 with the exception of SK03 which retails for $77.25.

Osprey

Osprey will continue to release titles in its *Men-at-Arms, Elite Warrior* and *New Vanguard* series throughout 1995 and 1996. We've picked out mostly the *New Vanguard* items, but this is by no means a complete list. The schedule is packed with titles from all eras—especially in the *Men-at-Arms* and *Warrior Series*. The *Elite Series* also contains many subjects that would be of interest to armor modelers. Here is a tentative list:

Right now: **New Vanguard 11, M3 Half-tracks; New Vanguard 12 BMP IFV.**

April '95: **Warrior 12, German Storm trooper (WWI).**

May '95: **Elite 59, U.S. Marine Corps; New**

Vanguard 13, Scorpion; New Vanguard 14, Crusader Tank.

September '95: **New Vanguard 15 Flammenwerfer; New Vanguard 16, Leopard 1 MBT.**

November '95: **Warrior 16, Green Berets in Vietnam.**

January '96: **New Vanguard 17, KV Heavy Tanks; New Vanguard 18, Challenger 1.**

March '96: **Warrior 18, British Tommy 1914-18.**

May '96: **New Vanguard 19, Sturmgeschutz III SPG; New Vanguard 20, M2/M3 Bradley IFV.**

July '96: **Warrior 20, Marines in Vietnam.**

September '96: **New Vanguard 21, Panther.**

As usual, we'll update the schedule as information warrants.

Scale Model Accessories

New releases from this clever kit maker included Ref 120 **Faun cargo and Tank Transporter** versions. This truck was used by the Germans to transport the small Panzers. It is offered in two versions. Price $87.96.

Second new item was the **Ford V3000 Maultier** version, Ref SMAV 121. Price $59.13. A super kit and the cargo version will come out around March.

SMAV 122 is a neat little kit of the **German Goliath Sdkfz 303**, demolition R/C vehicle. Highly detailed including its transport trailer. Price $21.87.

Finally, a conversion for the Italeri GMC kit, is a version of the **American Gasoline Tanker**. Just the ticket for that Red Ball Express dio you've been waiting to do! Price $27.07.

SMA really had some unique ideas that where well executed. You may just come away with prize winners. Recommended. Some items available in the U.S. through Squadron Signal mail order, see above.

Tamiya

Tamiya lived up to expectations and dropped its **Panzer IV** bomb at year's end. As usual, this immediately raises questions about what's next. Of course, they're not too chatty about future releases. But we have it on good authority that the level of armor activity will be about the same as last years.

Right now, we're looking at a slew of armor extras and add-ons. More, in fact, than we can ever recall seeing from our Japanese pals.

Announced late last year, through early this year, were the following goodies: 35180, **German Tank Engine Maintenance Crew Set**. This is already available and if you've not seen it, it's worth a look. It contains a drop-in engine module along with stuff like a ladder, oil can, torch, hammer, screwdriver and an oil drum. The engine has two types of air-filters, so you can use it with all Tamiya's recent big cats.

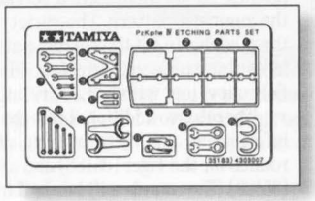
35184 is the **German Machine Gun Crew on Maneuver**. This should also be in the shops now. It's a five-figure set composed of a group toting all the various pieces of a heavy MG42.

66562 is a printed piece of **"Zeltban" camouflage** material. It's about four by seven inches with the outline of a shelter quarter on one side. The pattern and color appear to be an SS one. The product retails for around four dollars or so.

Like the Panther, the Panzer IV will be accessorized to the max. 35182 is a set of **brass projectiles**. It contains 12 rounds (6 AP and 6 HE) with 6 empty cases. This one's out now, $14.00.

35183 is listed as **Panzer IV Photo-etched parts Set**. It's a fairly small sheet that is primarily made up of the rear air-intake covers, fender stays and five different types of tools. $12.00.

35185 is **PzKpfw. IV On-vehicle Equipment Set**. This set consists of eighty parts for the Panzer IV. What you get are all of the various tools for the tank, like the fire extinguisher, spanners, shackles, wire cutters, etc., etc., etc. What's really cool is that they throw in both the early and late types of several of the tools, so the set can be useful on more than one model. And as any good geek knows well, most of the tools were interchangeable with the Panzer III, II, and even Panthers and Tigers. Added bonus: many of the tools (like the jacks) do NOT have molded on brackets, so you can use the plethora of photo-etched pieces out there to detail them. Also thrown in for good measure are a blackout light, Bosch light, convoy light and a horn. Lights and tools were always the biggest deficiency of many of the older German armor kits. Problem solved! In the shops now for $7.25.



35186 is a **German Fuel Drum Set**. This is a really nifty little item that contains three 200 liter drums and eight 20 liter "jerry cans." Both are fully detailed with separate filler caps for the drums and properly molded caps on the cans. The cans also bear their correct metal imprints along the top edge and have the correct handles. In addition to the cans and drums, a hand operated gas pump and a standing tap is included. Nice stuff. Look for this in the shops now for $9.00.

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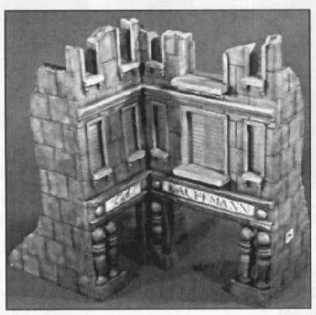

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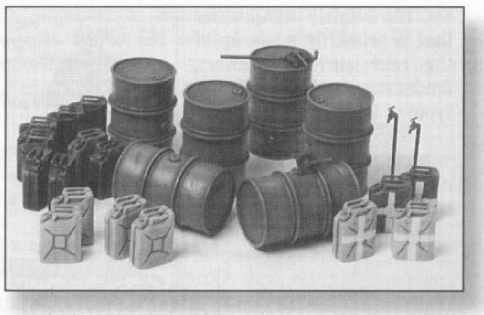


35187 is a **Zimmerit Coating Applicator**. This is a photo-etched set of six tools all of varying widths and pitches. All of them have a serrated edge to replicate the zimmerit pattern. The variety of sizes will enable the modeler to get the correct pattern over all types of irregular surfaces. Awesome deal! This is another February item with a $12.00 retail.

There's two additional sets that we have only scant information on. We're hearing about a set of 8.8cm rounds for the Tiger (35188) and a German Ammo Crew (35189). The rounds will be similar to earlier items and the crew will apparently be posed "bombing-up." Price on both is TBA. Seems kinda strange they'd release accessory items for a kit that's been out for at least five years. It makes you wonder something else could be in the works...

As we move into summer, some of the older items will begin to reappear. So far, we know we'll see the Matilda kit sometime around April or May.

The last item on the list is a 1/20 scale **M1025 HUMVEE** (23007). This is an interesting little item. It's sold partially assembled and the die-cast body comes pre-painted in a black and OD scheme. The model has a fully detailed engine, suspension and axles. It's not at all that you'd expect from a die-cast model, the detail is

quite impressive. The kit would make a fascinating super-detailing and weathering project. Tamiya once had a set of 1/20 race crew figures available and the ambitious modeler could convert these into suitable companions for the HUMVEE. This product is available now for $192.00. Look for the civilian version of the kit soon, number 23008.

Tamiya plans some type of product announcement in mid-June to coincide with a planned exposition to be held at the Tamiya headquarters in Aliso Viejo, California. This should be new products announced at the Shizoka Hobby Show held in Japan in May.

If you have any questions about Tamiya products, you can call their model "hotline" at 1-800-TAMIYA-A. Call between 9 and 6 pm PST.

Testor/Italeri

Italeri's been on the poky side this past year. This year they'll be off to a slow start as well. Here's the list as of early 1995.

April: 210, **Marder** (reissue), $22.00; 227, **Steyr RSO** (reissue), $22.00; **U.S. Trailers** (reissue), $15.00; **Panzer IV H** (reissue), $26.00 and **U.S. Army Motorcycles** (reissue), $12.00. The reissues as listed as limited editions.

May: 284, **M-925 U.S. 5t 6x6 truck**, $18.00 and 280, **Leopard II, improved**, $23.00.

August: 286, **Tiger I Ausf. E**, $23.00; 287, **Mercedes Benz Truck**, $18.00; 281, **JS II** (revised date), $23.00; 282, **T-34** (revised date), $18.00 and 352, **Soviet Cavalry**, $6.00.

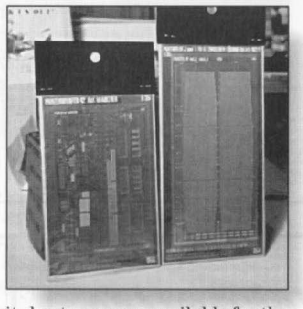
December: 285, **Bergepanther**, $23.00; 288, **M4A3 w/Calliope rocket launcher**, $23.00 and 289, **SU-100**, $18.00.

Some highly intriguing stuff. The Italeri stuff is always such a great value for the buck. We just wish we didn't have to wait so long. We'll bring you further details as they become available.

In the next issue we begin a new feature called **Roadtest**. One of the first items reported on will be the **Model Master Airbrush**. This is a very unique system that uses removable tips instead of the traditional needles. So far we like it. Look for a full report in the next issue.

The Show Modelling

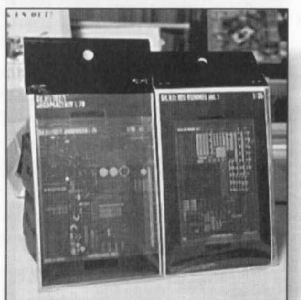
This well-known producer of photo-etched sheets, bring another round of goodies to the table in 1995. Scheduled for immediate and future release are: **Jagdpanzer L/70**, this now includes white metal parts (037); **Side Skirt Set for DML's Pz IV J or Zwis** (036); **Panzerwerfer set** (066); **Waffen SS Insignia** (058) and a figure item; **Waffen SS Tank Officer** (067F).



Two new zimmerit sheets are now available for the **Panther A** (063) and the **Panther G** (057).

Pricing information is not available on the above listed items.

In addition to the new figure items TSM is branching out into injection molding. We received a set of the **Opel Blitz late-type** wheels. The set is composed of seven identical sprues, from which you can construct a complete set of tires for one truck. They represent the later 8-spoke version also used on the Panzer Werfer and the Opel Maultier.

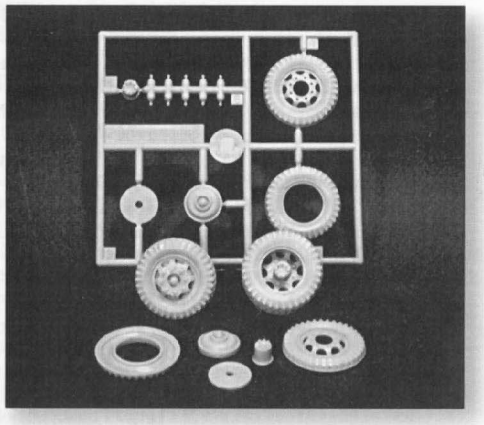


Each wheel is split in half, and the front and back wheel bases, hubs and lug nuts are all separate. The tooling is first rate and German transport fans will definitely be transported by this set.

Another good thing about these is that many of the older Italeri kits are suffering serious cases of "wheel-rot." We're not sure of the cause, but some have claimed that the rubber in the kit's tires reacts to certain paints or just plain old rots away. This set appears to be the perfect solution. The Opel Blitz wheel set is number 035 and it retails for $17.98.

VLS

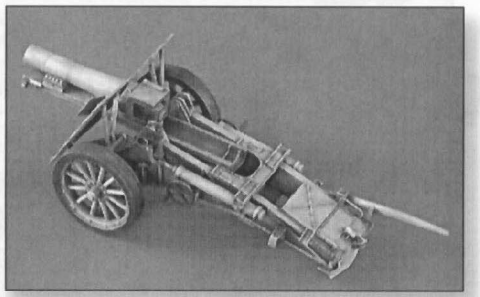
As usual, we're just going to skim the top with these guys... At Chicago this year, VLS was showing off two of its new 1/16th (120mm) scale treats: the **88mm flak** and the **Panther A**. Both were very impressive, both in detail and in size. Each was very cleanly cast in resin and the Panther included a substantial sheet of photo-etched parts. Seeing all that wonderful VP casting in such quantity certainly makes quite an impact.



There wouldn't be too much extra to do to either kit, in terms of detailing. Your biggest problem would be where to put them when they're done!

The 88 is stock number VP4 0970 and it retails for $329.95. The Panther is number VP4 0952 and it retails for $439.95.

The big scale stuff has been very good to the folks at VP, so the line will continue to grow throughout 1995. An **SAS conversion kit** (VP4 0973, $59.95) for their earlier Jeep, an **ACAV** kit for the **M116** (VP4 0991, price TBA) and a complete kit of the **M151 MUTT** (VP4 0985, $169.95) are among the many new items.



Numerous items will be added to the 1/35th scale line as well as more 120mm figures.

One particularly interesting item is the **German WWII SiG Infantry Gun**. This item has been designed to meet a price point of under twenty-five dollars. This makes it competitive with a comparable plastic item. Is that interesting or what? Look for stock number 1001. Could be the first of many.

Don't forget that VLS mail order also represents a veritable TON of other products. Check with them directly for a complete monthly update on all their goods.

At the VLS booth in Chicago, a video was playing scenes from **VLS' Miniature World**. We've heard of this, but seeing on tape finally gave us some idea of the scope of this vast display. Located just west of St. Louis, this is a true museum of our hobby, with yard after square yard of dioramas, shadow boxes, miniature weapons and displays. Many of the well-known

dioramas you've come to know over the years are on display. Shep Paine's shadowboxes, Bob Letterman's "Fall of the Third Republic," and Lewis Pruneau's rail guns are among the diverse group of work represented.

If you live in the Midwest, or are passing through the St. Louis area, this will be worth checking out. Admission is $5.00 for adults and $2.50 for kids. Senior Citizens get in for $4.00.

More information on Miniature World and VLS in general can be obtained through VLS, Lone Star Industrial Park, 811 Lone Star Drive, O'Fallon, MO 63366. (314) 281-5700.

Warriors Scale Models

We have just recently acquainted with Warriors. It's a completely new line of products from California and it will be composed almost entirely of figures in 1:35th and 1:16 scale, with a 1/9 scale bust thrown in here and there for good measure. We've begun receiving samples and the pieces all look quite spiffy.

The list is quite extensive and it contains many intriguing sounding subjects. A **54mm Wyatt Earp**, sculpted by Bill Horan is one example (this is scheduled for May release). The smaller stuff seems to be mostly armor related, and we believe much it is the work of John Rosengrant. Pretty good company to keep, we'd say.

Here's the list for the first few months of 1995: in 1/35th scale; 35G001, **German Infantryman with rations**, $12.50; 35G002, **German SS Grenadier Ardennes**, $12.50; 35G003, **German SS Grenadier Ardennes/Walking**, $12.50; 35G004, **"Desert Fox,"** $12.50; 35A001, **American Tanker 1944**, $12.50; 35AC001, **Chateau Wall**, $12.50; 35PR001, **"Victors" vignette**, **V-E Day U.S. & Soviet**, $22.65 and 35VT001, **"Battle of the Bulge"** vignette, $55.00.

The 1/16th scale items are: 16B001, **British Desert Rat Tanker**, $35.00; BT001, **Viking Chieftain Bust**, $22.95; 16G001, **Afrika Korps Tanker**, $35.00 and 16AC001, **American Crates & Boxes**, $22.95

There is also a 1/9th scale **Pirate Bust** listed as BT002, for $35.00.

Many more items are coming in the months ahead and we're just touching the surface. We'll keep you posted as more intel (and more room!) becomes available.

To obtain any of the Warriors items, check with your favorite shop or contact: Warriors Scale Models, Inc., 543A South Raymond, Pasadena, CA 91105, or call (818) 584-0573.

Wolf

The Wolf range of 1/35th scale figures has the following new additions: WAW10, **British Tankman**, rolling sleeves; WAW11 **German tank Officer**, black jacket/winter trousers and WAW12, **Dejected German Soldier**. This latter item is poised leaning against and small wall section and is also suitable for leaning against Tamiya's Kettenkrad.

Xuron

We were first introduced to Xuron at last year's Chicago show. They produce a line of very nice of cutting tools. Most (if not all) of the shears work on the principal of "blade by-pass." The blades do not actually meet, but move slight out of the way as they close. This means that the tools truly cut a given material, rather than ripping or crushing it. This is pretty handy when you're cutting styrene parts off of sprues. Think: track links!

Xuron is still going strong with another addition to their line this year: the **High Precision Scissors**. This is a very fine tool originally designed for cutting photo-etch. However, as Xuron points out, its uses go way beyond just photo-etch. This is item 440.

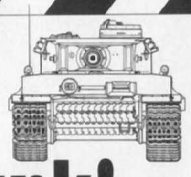
We are currently road-testing both the Precision Shear and the High Precision Shear. The performance of each is highly impressive. Look for details of this test in the next issue and look for Xuron Tools at your local hobby shop.

What's on the Tubage

HBO presents **In Pursuit of Honor** in March and April. This film is based on the true events surrounding the mutiny of five U.S. Cavalrymen in 1935. The movie stars Don Johnson and a handful of interesting restored vehicles. We spied a 6-ton M1917 tank (or an FT-17 disguised as one) along with a White Scout Car and a few interesting trucks and weapons.

Play dates run through March and April. It should pop up on tape soon after, if you miss it.

Tankety-Tank



Tankety-Tank

Tankety-Tank!

Accurate Armor

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Double Takes

DML Sturmpanzer IV Brümmbar Late, SdKfz. 166
Kit number 6026
Price: $29.98

Third in DML's late Panzer IV series is the late-war Brümmbar. It's composed of 499 parts, two thirds of which are the track links. The kit fills a gap in Brümmbar history, the late style being almost completely different from the mid-production vehicle Tamiya. What makes it different? Here's a brief list: a revised squared off fighting compartment, machine gun mount, armored barrel sleeve, dual exhausts and Panzer IV J style hull. The only accuracy gripe I found was that the sideskirts included should only have three sections, like the boxtop picture. The skirts shown were only fitted to the prototype vehicle. Combat photos show either no sideskirts at all or standard six-section units shaped like the Panzer IV's. The skirts provided are a hybrid of both styles.

Construction was fairly simple. I had a little trouble mating the fighting compartment to the hull piece. This probably could have been alleviated by removing the treadplate where the fighting compartment contacts the fenders. Applying zimmerit paste would have also covered any cracks. I wanted a later vehicle, so I lost the zimmerit option.

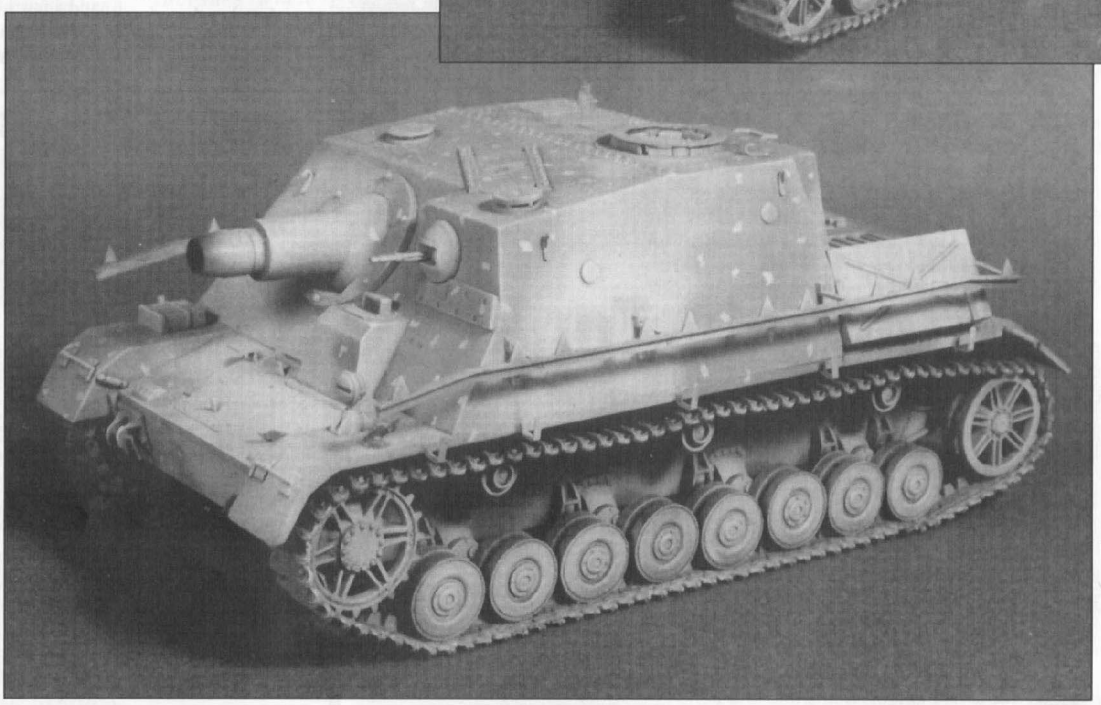
I am still befuddled by some of the choices DML makes when engineering a mold. The rear hull plate, while glassy smooth inside, has five ejector pin marks on the detail surface. Couldn't they have just turned the part over? Again, zimmerit would have covered the holes. Secondly, the resilient steel roadwheels attach to the sprues by their delicate front edges. This makes it nearly impossible to remove them without substantially marring their thin edges. Couldn't they have been attached at the middle or back edge? Remember that you've got 32 wheels to deal with too. Incidentally, there are no extras, but there are brackets for their installation.

The modeler is given the option of mounting either 3 or 4 return rollers per side. Upon inspection, I found the locator points for the roller and the fuel caps caps where in the wrong places. Using the plans in *Achtung Panzer #3*, the roller posts and caps were relocated.

The tracks are great. They cleaned up easily, except for the ejector pin marks, which I left. The wheels pretty much cover them. The tracks were glued together using Testor liquid cement with the black Model Master applicator. I allowed them to bond slightly, then painted and wrapped them around the suspension to dry in place. This was done after the tank was painted.

A very nice photo-etched sheet of parts is provided. The parts include the ring around the commander's hatch, the spare track link holders and the side skirt hanger pins. I'd like to put forward a small thought: I love the fact that P.E. is included. But, wouldn't it be cool if ALL the potential etched parts were included? I know this would probably triple the size of the sheet and affect the final price, but I'd be willing to bet that most guys would pay it.

I wanted to represent an Ardennes Offense vehicle. I used the Tank Magazine Special "Battle of the Bulge," (page 36) as a reference. The kit was painted Xtracolor Dunkelgelb (dark yellow) overall, with bands of Testor brown drab. Ambush spots were painted with a small brush. When the model was dry, it was washed with thinned black, drybrushed with pale yellow and tan, then flat-coated.



DML's late Brümmbar is an easy to build, well-detailed replica of the original. It fit well, came with cool photo-etched parts and even has rifling in the gun barrel! I felt that the engineering gaffs on the roadwheels, back plate, return rollers and their locator points stained an otherwise excellent model. I want to commend and encourage DML on their vastly improving armor line. With a little more thought to molding, they could easily keep pace with the "Big T."

—Eric Knight

Ferdinand Porsche, creator of the 356 speedster and the 911 Carerra has earned a place in history as a sports car genius. His place in the history of tank design was not so stellar. To his credit, he had many good ideas, such as the diesel electric drive. This drive system eliminated the need for transmission gears, but used miles of strategically critical copper wire. Porsche spent the war designing, tinkering and working on experimental designs, safely out of the way of mass production. Porsche's two most significant AFVs are now both available in plastic. First DML released the monstrous Maus and now Italeri tackles the VK4501-P Porsche Tiger prototype.

The VK4501-P and its rival, Henschel's VK4501-H competed in a run-off for the Tiger tank's production contract. The more conventional Henschel design won and most of Porsche's 50 prototype vehicles were converted into Ferdinand and then later, Elephant, tank destroyers (more like destroyees, actually).

Enough history already! The model is cleanly pressed in dark gray plastic. Several parts, notably the suspension, come from Italeri's Elephant kit. Of special note are plastic tow cables that look like real cable and plastic engine intake screens that look like real screen.

The box-like upper hull gets glacis and side armor panels laminated to it. Care must be taken to get a tight fit as the parts tend to jockey for position and crowd each other out. All of the tools fit on to weld-points on the hull sides. The tools look good, but could benefit from some retainer clips.

The tow cables, normally the first tank model items to get replaced, were used stock. They looked just like wire cable and were much easier to use.

Italeri did a great job on the intake screens too. Somehow, they managed to reproduce wire mesh in plastic without flash, distortion, short shots or solid backs. However they did it, it works!

Underneath, new idler and drive sprockets are provided. The extra four spokes (22b) in the front sprockets don't quite reach their rims. Rather than shimming them with plastic, I melted their backs with Tenax 7-R and fused the arms to the rims using the melted plastic/glue mixture.

The turret went together with no problems. It closely resembles the standard Tiger turret, except that it's roof has a constant, shallow slope with a big raised area running down the center. This raised section allowed for maximum gun depression. The gun itself is longer than a standard Tiger's, but looks essentially the same. A Panzer IV style turret basket angles down from the turret rear from some odd supports. The Porsche team even hid spare track links behind it.

The model was base coated in black and then oversprayed with Gunship gray. It then got a black wash and was dry-brushed medium gray. The tracks were painted Humbrol track color (how appropriate), weathered with silver and installed. The tracks appear to be 3-5 links too long and hang loosely on the suspension. They could benefit from minor surgery.

Italeri took a brave step in kitting the Porsche Tiger. This rare vehicle belies its family resemblance to both its rival's Tiger I, and its final incarnation, the Elephant. The model suffers from a few fit problems, most notably the tracks, but it's well detailed and owning it is almost as much fun as driving a 911 (I said almost).

—Eric Knight

Testor/Italeri Ferdinand Tiger P
Kit number 278
Price: $23.00

Call me a spoiled little modeler, but once you've seen or built the Tamiya Panther, nothing else seems to compare. Don't let that bratty statement make you think I hated this latest release from Italeri (I didn't). Although there are distinct differences between the two manufacturer's kit, here, you do get what you pay for. At this price, it's way too easy to overlook its many faults. In fact, it's almost half what you'd pay for a Tamiya G.

The Jadgpanther didn't go into production until 1944, so to call this a late war Jadgpanther is a bit of a misnomer. However, this kit seems to be a hybrid of late '44 and early '44 versions, having features common to both.

Overall accuracy is good, but there's a few nick-picky things I found. First, the vent hole cover on the roof of the fighting compartment is misplaced. The kit has it located just above the gun mantlet on the roof, but for a late model vehicle it belongs behind the commander's hatch on the right side. The rubber loading hatch dampers were changed on the late model to a simple bent metal piece welded to the top of the engine compartment. Both are easy to fix and should be no great challenge. The other item of note is the gun. It's fairly simple and the muzzle brake seems a bit too big. The elevating mechanism is poorly done. I just glued mine in place.

The molding detail overall is pretty good and makes for a good representation of the real beast, but it lacks a certain crispness found on "other" Panthers. Weld seams are soft and muted. For example, the areas around the muffler and the interlocking welds of the fighting compartment. The flame dampers and the ball MG mount also lack crispness. You may want to steal these some from that other Panther kit.

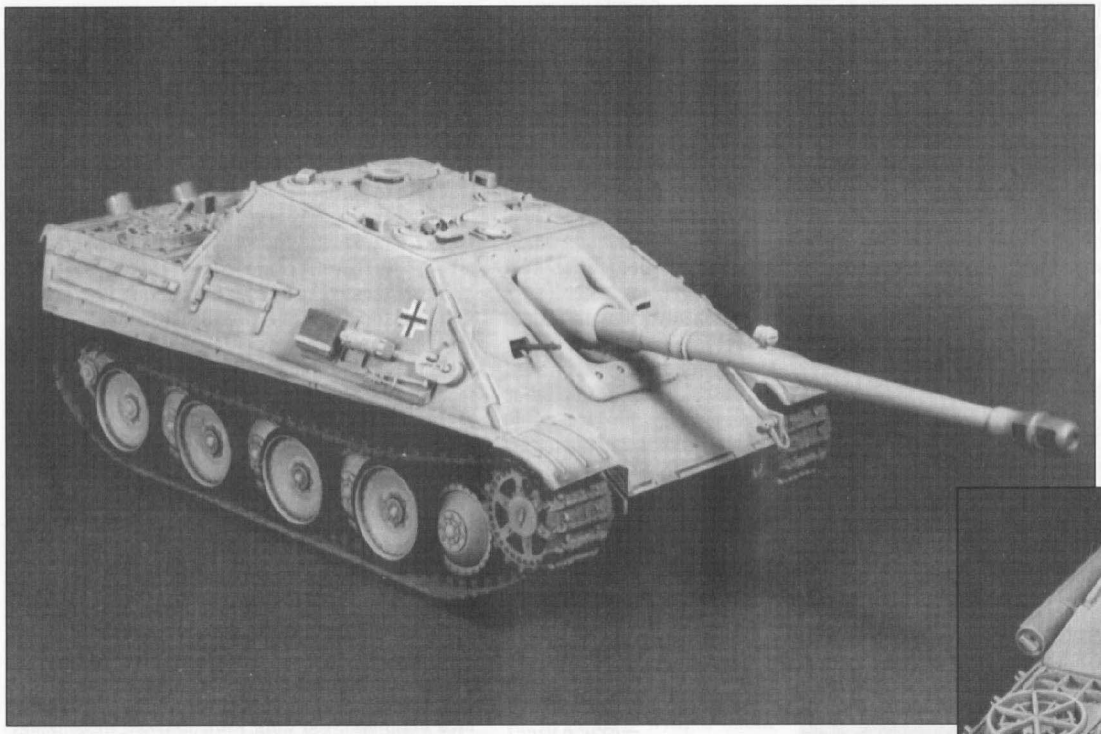
The biggest flaw, I felt, were the roadwheels. Italeri hasn't fixed the casting problems inherent to the wheel hubs of the Panther A. However, fewer of the wheels were distorted on my example, compared to my earlier Panther A purchase. Again, you may want to consider replacing them with the other kit's. It'll take some shimming, but it does work.

Fortunately, construction was no sweat. I pretty much dove right in. I built the upper hull first, taking time to build the gun and cleaning rod case, so I could come back later to get rid of the seams. With those parts curing, I finished the upper hull, rear engine deck and lower hull. I like to assemble the roadwheels last, after I've had a chance to paint the lower hull. I welded the flexible vinyl tracks together with a hot-knife applied to the joining pins. As on the earlier A kit, they are supplied in two sets for each side.

Also like the A, there's an engine included. It's a simple affair, composed of only three parts, which leaves plenty of room for the modeler who desires to super detail. Granted, it is tough to see more than what they give you, unless the main deck is removed.

I chose a simple one color scheme of dark yellow. I used Tamiya paints, but I think I'll be switching back to enamels. The Tamiya paints are nice, but there's just more variety out there with enamels. I sprayed the entire model flat black, then oversprayed with a slightly darkened dark yellow. This was followed by two subsequently lighter coats of dark yellow sprayed in a cloud pattern, paying specific attention to the sharp edges and angles. To achieve the cloud pattern, I spray with a very light air mixture close to the model.

Next, I painted the rubber on the roadwheels and attached them to the model. Once everything had dried, I applied Future Floor Wax mixed with black

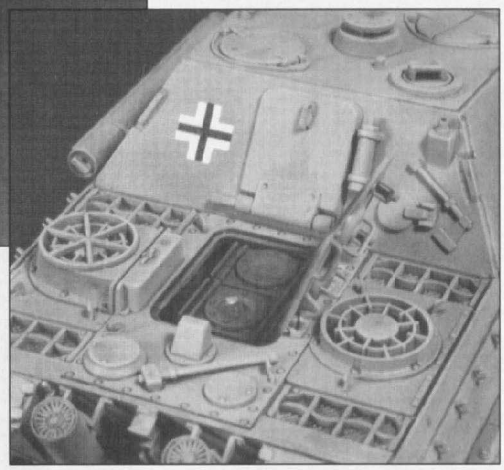


may pop up with set soon.

I completed this kit in only eight hours. Being an assault gun, there's less work, due to the absence of a turret. In these days of skyrocketing kit prices, it's hard to knock a model that costs less than twenty-five dollars. It might not be Tamiya (there, I said it), but it is currently the only game in town.

—Tom Jett

Testor/Italeri Jadgpanther
Kit number 295
Price: $23.00



opaque water color paint. This leaves a shiny surface that receives decals well. After the decals were dry, I drybrushed with a very light yellow—almost white. When this had dried, the entire model was sprayed with Testor Dull-Cote. I painted the tracks with my own version of the now discontinued Floquil Antique Bronze, which I mixed from Floquil Boxcar Red, Model Master Steel and Flat Black.

The model ended up looking pretty good and it is a fairy good representation of the real beast. There are a few things you can to do to spiff it up. The kit would really benefit from some photo-etched parts. None are currently available. The On-the-Mark set for the Tamiya kit may work. I do know that the Tamiya screens will not fit, so take a pass on those. The Show Modelling

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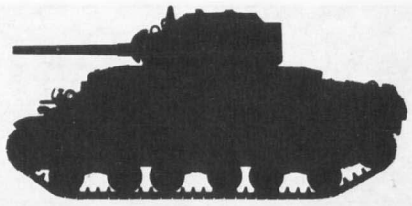
The Sherman Tank: A Fragmented Look



PART 1: THE NOSE END

by Pete Harlem

Years ago Volkswagen ran ads in American magazines in which they bragged about the Beetle's improvements for the new model year. The ads said that this year's version looked like last year's car, but it had a hundred-odd modifications that you couldn't see that improved the little bug. The Sherman tank was just like that. Produced in a number of versions or models, each had lots of improvements as time went on. Most were not obvious until you looked closer.

This means that the armor modeler can spend a lot of time modifying any Sherman kit to reflect what is seen in reference photos. To make that chore a little easier, I have rooted out most of the different details found on the basic production Sherman differential housings and put them in illustrated form. The part called the "nose" was the armor cover for the differential/final drive housing that protects the lower hull.

The original differential housing casting for the M3 medium tank is often called "three-piece" even though it was made of no less than 7 parts. The three main sections comprised a center curved piece bolted along vertical flanges to the two side sections. Two cast final drive housings were welded onto the sides of each side section, and two tow ring mounts were welded inboard of the final drive housings. Once assembled with the differential and drive assembly inside, the whole unit was bolted onto the front of the tank hull.

The three-piece housing was changed little over the years that it was in use, and it was installed in modified form on many early Sherman tanks. Once the M3s and M4s went into combat in WWII, the housing was found to provide too little protection from the German's increasingly good anti-tank weapons. The original housing was complicated to build as well, so an easy to produce, superior armor solution was sought. The result was a one-piece casting that resembled the original housing in shape, but with smoothly blended contours that removed some of the original's shot traps. The first one-piece castings were later found to be too thin in the center, so later versions had reinforced "beaks" that went a long way toward a complete solution. A final casting was similar to the later one-piece castings but had 1.5" more armor. This was only used on the M4A3E2 "Jumbo" tanks.

Each basic type of casting can be broken down into several sub-variants. The sub-variants reflect subtle changes made in the production process and differences in the molds used by the various manufacturers (Chrysler molds differed from ones used by GM or Ford, for example). Some of the differences were simple, such as the wide variety of locations used for molded on casting numbers, but many are specific to certain models of tank: M4A1 castings tend to be different than M4A3, etc. Let's look in more detail.

Type 1

Type 1 castings are three-piece and can be easily identified by the two bolted flanges used to assemble the three parts. There are three sub-types of the Type 1 casting.

Type 1A - This casting was used on the M3 tank and very early M7 Motor Carriages. It usually had two notches cut in the top edge so that the twin bow .30 cal machine guns could be fully depressed. It has a cutout in front of the 75mm gun and it has small notches at each upper corner that permitted a clean fit with the angular side armor plates. It was used on

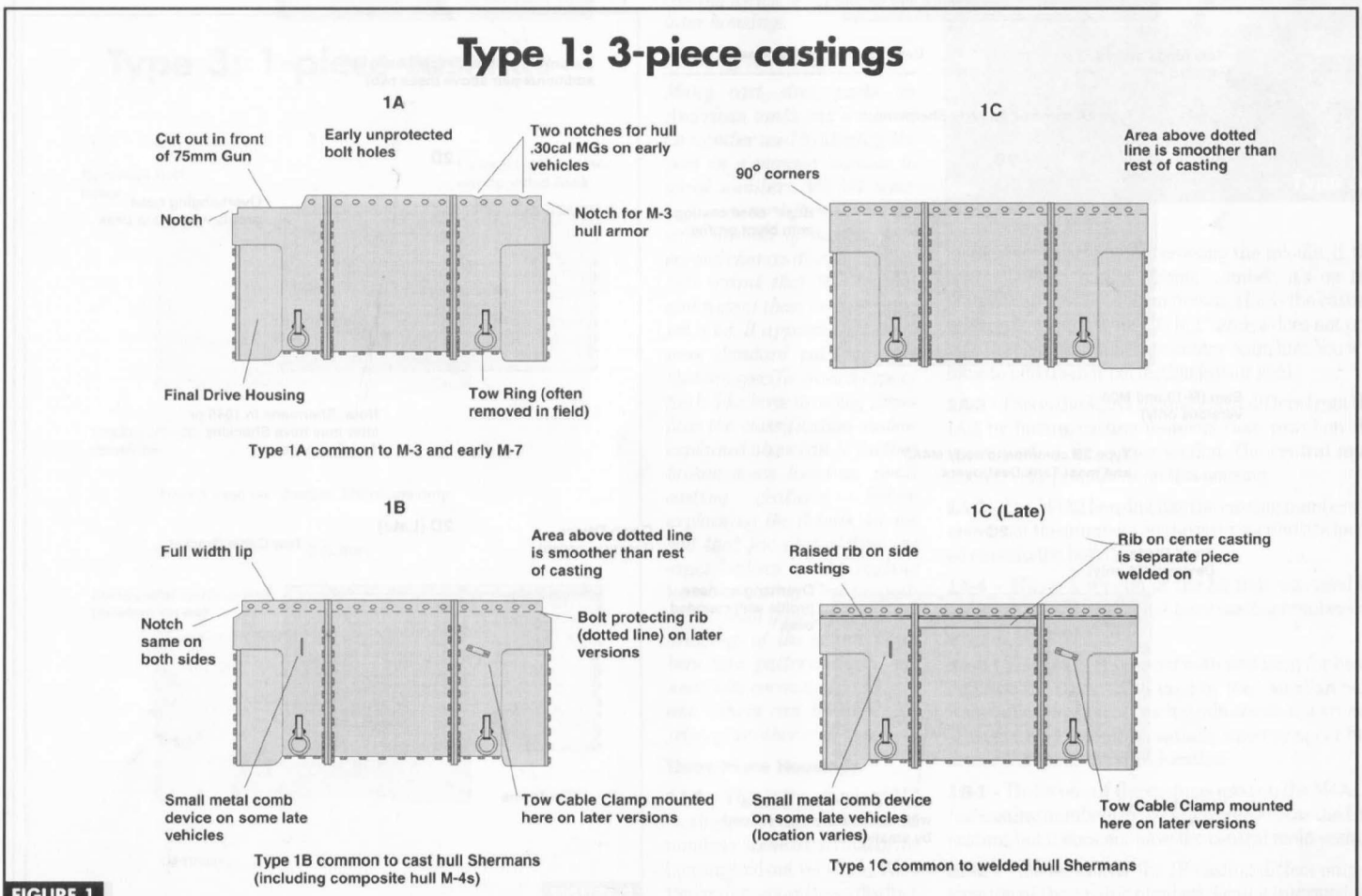
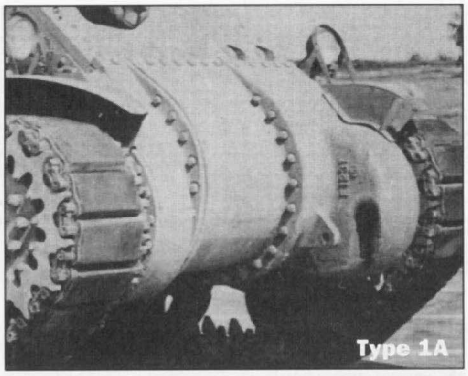

Type 1: 3-piece castings
1A
Cut out in front of 75mm Gun
Early unprotected bolt holes
Two notches for hull .30cal MGs on early vehicles
Notch
Notch for M-3 hull armor
Final Drive Housing
Tow Ring (often removed in field)
Type 1A common to M-3 and early M-7
1C
Area above dotted line is smoother than rest of casting
90° corners
1B
Full width lip
Area above dotted line is smoother than rest of casting
Notch same on both sides
Bolt protecting rib (dotted line) on later versions
Small metal comb device on some late vehicles
Tow Cable Clamp mounted here on later versions
Type 1B common to cast hull Shermans (including composite hull M-4s)
1C (Late)
Raised rib on side castings
Rib on center casting is separate piece welded on
Small metal comb device on some late vehicles (location varies)
Tow Cable Clamp mounted here on later versions
Type 1C common to welded hull Shermans

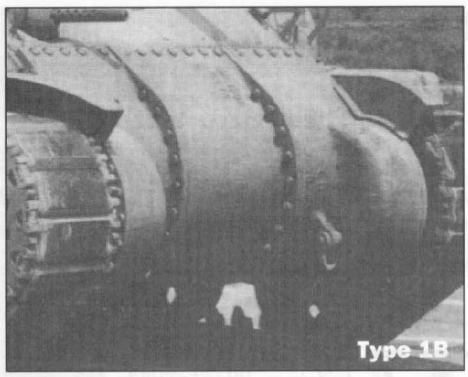
FIGURE 1



the first M7 hulls even though the gun notches had no function on the Priest.

Type 1B - This housing reflected the modifications made to the 1A casting to fit it to the Sherman tank. The bow machine gun notches and 75mm gun cutout were deleted and a full width lip was used to attach it to the upper hull armor. Several versions of the lip were made and late versions had a raised rib cast in to protect the mounting bolts. The 1B housing was only used on cast hull Shermans like the M4A1, and that included composite ("Hybrid" in British service) hulls.

Type 1C - This casting reflected the differences needed to adapt the three-piece housing to the welded-hull Shermans such as the M4A2 and M4A4. The main change was a new upper lip that did not have any corner notches. Late war versions of this casting were improved with the bolt protector rib, and note that the center section had a welded on rib piece that clearly identifies it.



Type 2

These are the Sherman's basic one-piece castings. Figure 4 shows cross-sections of the different subtypes. This shows how the central "beak" evolved into a better profile and later versions had thicker frontal armor. Also, compared to the Type 1 castings, the tow ring mounts were moved inboard to accommodate the wider final drive armor. Type 2 also had a variety of identifiable sub-types.

Type 2A - This was the first of the one-piece castings to see service. It had a profile that followed the shape of the old three-piece unit. The only lip type I've seen on these includes the bolt protecting rib. This housing was common on several early Sherman models, but

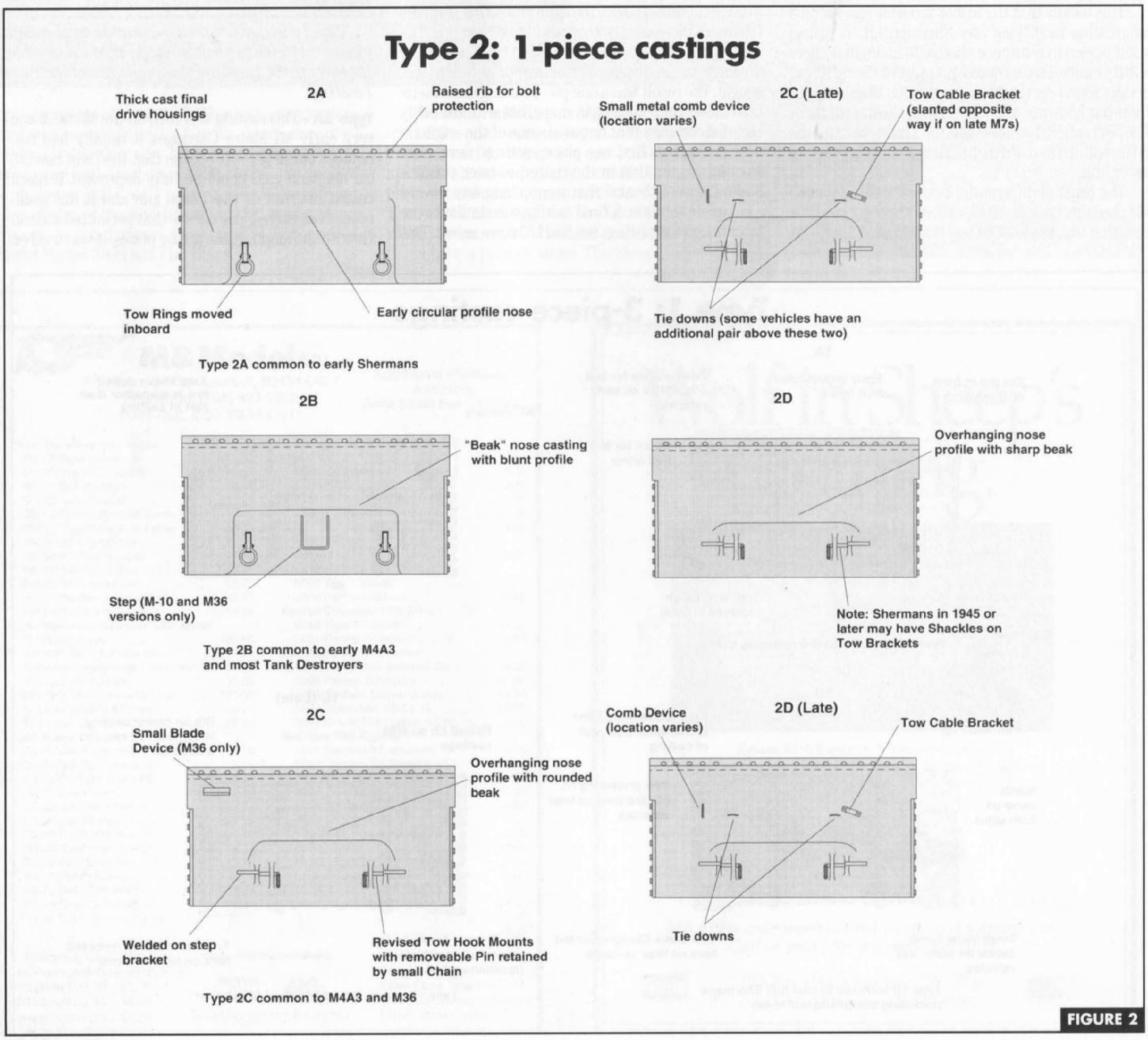
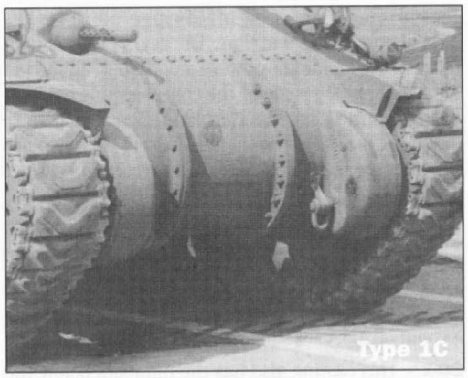
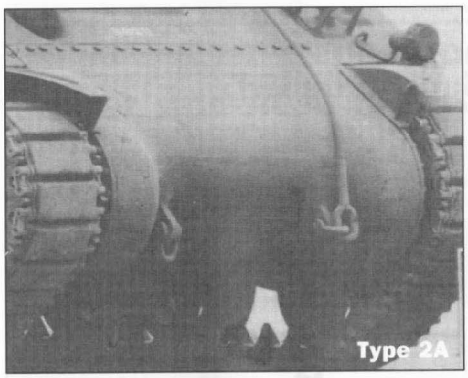
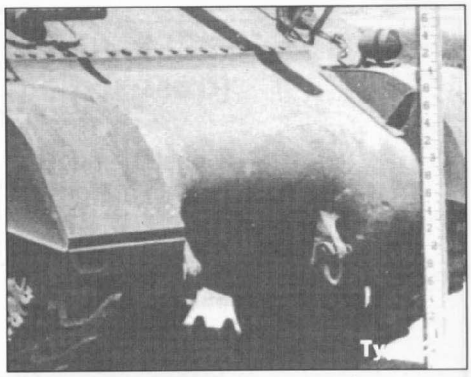

Type 2: 1-piece castings
2A
Thick cast final drive housings
Raised rib for bolt protection
Tow Rings moved inboard
Early circular profile nose
Type 2A common to early Shermans
2C (Late)
Small metal comb device (location varies)
Tow Cable Bracket (slanted opposite way if on late M7s)
Tie downs (some vehicles have an additional pair above these two)
2B
"Beak" nose casting with blunt profile
Step (M-10 and M36 versions only)
Type 2B common to early M4A3 and most Tank Destroyers
2D
Overhanging nose profile with sharp beak
Note: Shermans in 1945 or later may have Shackles on Tow Brackets
2C
Small Blade Device (M36 only)
Overhanging nose profile with rounded beak
Welded on step bracket
Revised Tow Hook Mounts with removeable Pin retained by small Chain
Type 2C common to M4A3 and M36
2D (Late)
Comb Device (location varies)
Tow Cable Bracket
Tie downs

FIGURE 2







its thin frontal armor led to it being replaced in service as better housings became available. Late in the war it would be found mostly on second echelon vehicles.

Type 2B - This was the first of the beak nose housings. The beak added armor thickness to the casting and improved the casting's ballistic profile. The 2B was common on M4A3s and most tank destroyers. It looks a lot like the 2A housing but the flattened surface below the beak gives it away.

Type 2C - This version had a more pointed beak than the 2B housing. It is one of the most common one-piece castings used and was even used on the M4A3 through Korea.

Type 2D - The 2D casting looks almost exactly like the 2C making it hard to identify in photos. The beak protrudes slightly further forward, and the shadow made by the beak has a very sharp line at the top. Fortunately, it was used on non-M4A3 types so deciding which type (2C or 2D) was on your tank model is easier than one might otherwise think.

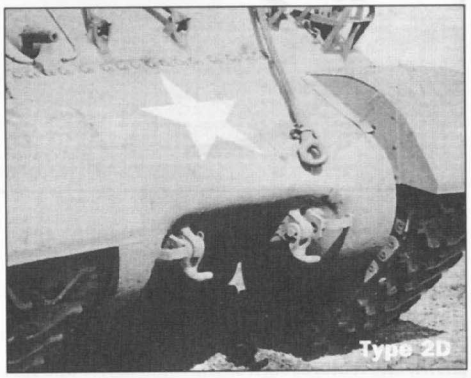
Type 3

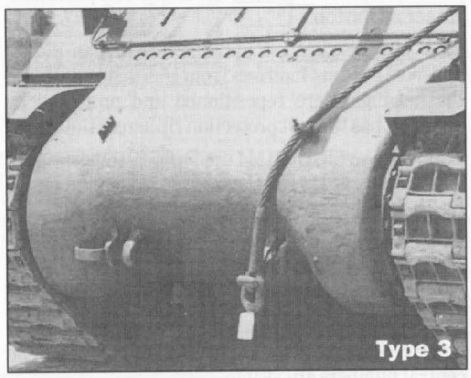
This is the easiest of the one-piece castings to identify because it is 1.5 inches thicker than the others. It has a beak, but the profile is more rounded than other late war tank castings. It kind of looks like a "fat-boy" version of the Type 2A. It was only used on the Jumbo M4A3E2 tanks and a few prototype vehicles that used the Jumbo hull.

Bottom Detail

The three-piece casting had three drain holes (plugged with a removable threaded bolt) in the bottom plate and two filler holes, one in each side of the final drive housings. The bottom of the final drive housings are flattened slightly where the drain holes are located.

The one-piece housings did not have the filler plugs or the central drain plug. Final drive oil (engine oil) was added from inside the vehicle and the differential drain was combined with the final drive drains for simplicity. Figure 5 shows a 2A casting which is typical of all later housings.





Type 3: 1-piece castings

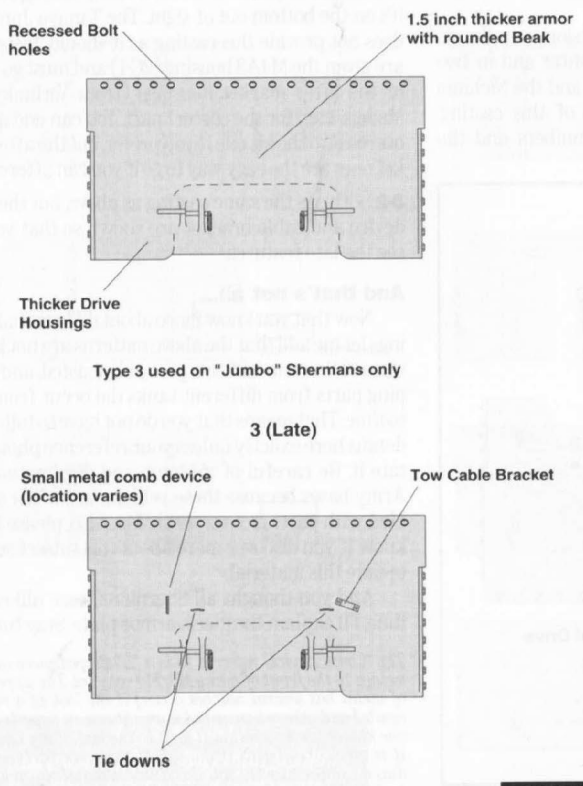


FIGURE 3

Casting Numbers

Many cast steel parts on American tanks had a molded on number used to identify the part in a manner similar to serial numbers. M3/M4 housings were no different, but the wide number of manufacturers and changes during production meant that the location and style of these numbers varied a lot. It appears that there were standard patterns used that are specific to each type of tank. The large drawing shows how the classification system explained above can be further broken down based on small casting features. Before explaining the details, let me add that few photos show the exact nature of the casting numbers clearly. That prevented me from giving you precise drawings of the actual numbers and patterns used, but some kits correctly show them and others can be discerned from your other references.

Three-Piece Housings

1A-1 - This is the standard M3 casting and it usually had mold numbers above each final drive housing laid out vertically. Also the center section has a distinct mold seam (dotted lines) crossing the middle. If the center section had a casting number, it's on the bottom and never visible in photos. This is the casting used on the Tamiya M3 kits but Tamiya does not provide the casting numbers or center seam line. You will have to add them if perfection is your goal.

1A-2 - This is the M3A1 casting and it differs from the 1A-1 by having casting numbers (two rows) on the upper part of the center section. The central mold seam is very prominent on this housing.

1A-3 - The M3A2 housing has the casting numbers as above, but the numbers on the right section are located close to the bolt flange.

1A-4 - This is a version of the 1A that was used on some early M7s. It does not have casting numbers on the side sections.

1A-5 - This is a 1A-1 housing with provision for headlights on the casting. It is used by the Canadian built Ram tank. Location of casting numbers is not known. The cutout on the left is partially filled by upper hull armor that bolts into this location.

1B-1 - This is one of the castings used on the M4A1. It has casting numbers in the same positions as the 1A-2 casting, but it does not have the central mold seam.

1B-2 - This version of the 1B casting differs only in location of the casting numbers. I call it intermediate

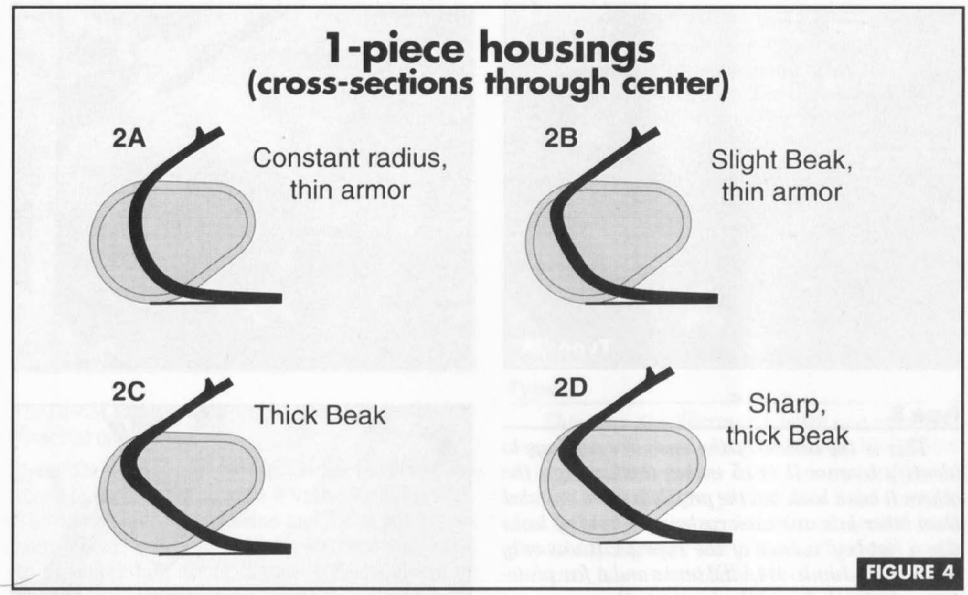


FIGURE 4

because I've shown a comb device* mounted above the casting numbers on the left.

1B-3 - This is a later M4A1 casting that resembles the 1B-1 unit except for horizontally applied casting numbers (two rows) on the upper center section. I've shown late features such as the comb device and tow cable clamp and this housing has the bolt protection rib across the top.

1B-4 - This is the casting used on Canadian Ram II and most Sextons. It differs from 1A-5 in lip width and the headlights are repositioned and protected by guards. It has the bolt protection rib across the top lip.

1C-1 - The welded hull M4 used this casting. The casting numbers are in the same pattern as found on the 1A-2 housing.

1C-2 - This casting does not have numbers on the upper center section and was used on the M4A2. The casting numbers may be located out of site below the nose.

1C-3 - The casting numbers on the initial M4A4 housing were located inboard on the side sections and no central numbers are visible.

1C-4 - This is a casting found on some M12 motor carriages. It has two rows of casting numbers on each side section mounted horizontally. No central numbers are visible on the ones I've seen. Chesapeake Models makes a kit of this casting: CMD-13. It has another cast number in the center section similar to the one shown here on 1B-3. Chesapeake may have found another version produced during the war or maybe copied from a restored tank that was put together with parts from several vehicles.

1C-5 - This is a late M4A4 casting. It differs from the 1C-4 in having the bolt protecting rib across the top. This is the casting given in the MP M4A4/M50 kits which include correct casting numbers on the side sections. The kit center section also has numbers molded on in the pattern shown in 1C-1 (above), but I cannot find a photo of a standard M4A4 with numbers in this location. Could be MP just found another combination.

One-Piece Housings

All standard one-piece housings have the full width bolt protecting rib.

2A - Casting numbers on this version are always located at the top to the left of center and in two rows. The old Tamiya M10/M36 kits and the Nichimo M4A1 kits feature crude versions of this casting. Neither has the correct casting numbers and the central shapes are a bit off because all these kits were motorized at one time. The gears needed more room so the kit moldings were modified to allow this. I suggest sanding some of the center section away to shorten the nose profile. The old Tamiya part has late tow hook brackets, probably incorrect on this housing. Chesapeake's kit, CMD-10, is a correct 2A casting.

2B-1 - Casting numbers are in the same position as the above housing. Used on tank destroyers, this casting had a welded on step below the beak.

2B-2 - Casting numbers on this version are located under the beak, one row running horizontally. This is a common M4A3 casting.

2C-1 - This casting also has the numbers below the beak. It also has late style tow hook brackets with welded on step bars. I've show the late features such as the comb device, tow cable bracket and two tie-downs. The Tamiya M4A3 kit has this casting but no numbers are molded on.

2C-2 - This is the late M36 unit and differs from above only in the installation of an inverted "t" section bracket on the upper left corner. The purpose of the bracket is unknown, but this casting was common to the M36 late in the war.

2C-3 - This is the 2C-2 but common to the later M7 Priests. It differs in having the cable bracket mounted to allow the cable to go around the MG pulpit side of the vehicle.

2D-1 - The casting numbers on this sharp beak housing are also located under the beak, only now there are two rows.

2D-2 - This shows some late features found on the above casting.

2D-3 - This common layout was found on most non-M4A3 Shermans late in the war. Sometimes late vehicles had two additional tie-downs mounted directly above the two shown here. The Italeri and DML Sherman kits have this casting but do not provide the casting numbers.

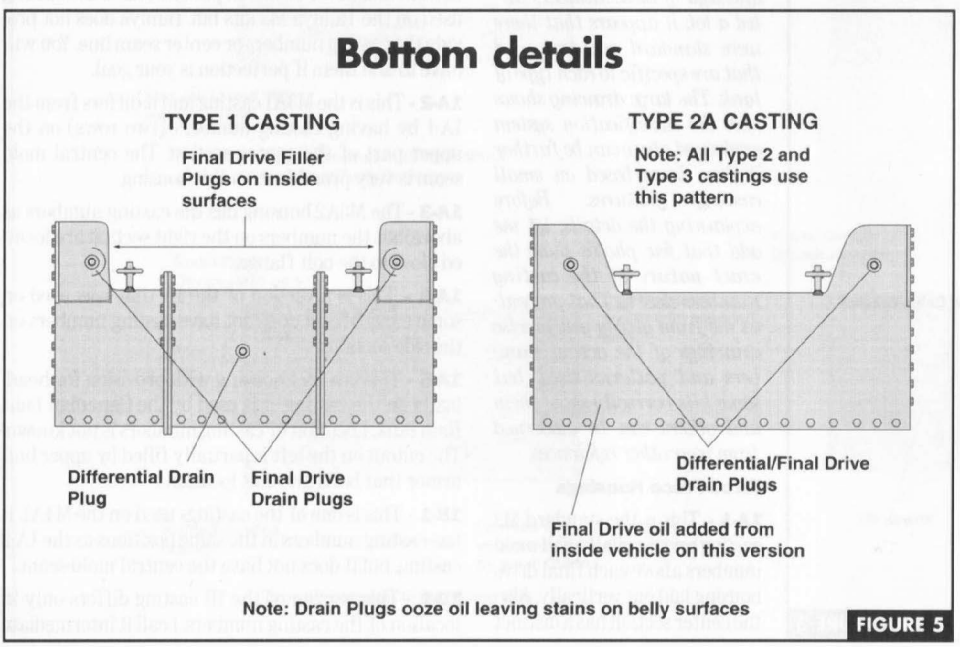
3-1 - This is the original casting for the Jumbo tanks. It is devoid of features and if it has a casting number, it's on the bottom out of sight. The Tamiya Jumbo kit does not provide this casting as it should. Instead we are given the M4A3 housing (2C-1) and must go to one of the after market housings (from Verlinden, MB Models, etc.) for the correct part. You can add a putty overcoat to the kit one if you prefer, but the after market ones are the easy way to go if you can afford them.

3-2 - This is the same casting as above, but the comb device and cable bracket are shown so that you can see the late features.

And that's not all...

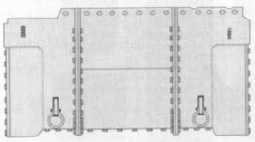
Now that you know more about differential housings let me add that the above patterns are not held in stone. Other sub-variants probably existed, and swapping parts from different tanks did occur from time to time. That means that you do not have to follow the details here exactly unless your reference photos dictate it. Be careful of museum and display tanks on Army bases because these vehicles are often assembled with parts from several M4s. Also, please let me know if you discover more about this subject so I can update this material.

And you thought all Shermans were alike. Next time, I'll explain the glacis armor plate. Stay tuned.

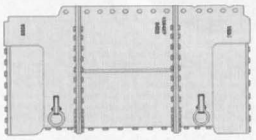

Bottom details
TYPE 1 CASTING
Final Drive Filler Plugs on inside surfaces
Differential Drain Plug
Final Drive Drain Plugs
TYPE 2A CASTING
Note: All Type 2 and Type 3 castings use this pattern
Differential/Final Drive Drain Plugs
Final Drive oil added from inside vehicle on this version
Note: Drain Plugs ooze oil leaving stains on belly surfaces
FIGURE 5

**The "Comb Device" referred to is a "L" shaped piece of metal welded to the front of many M3/M4 vehicles. The upper piece of metal has several notches giving it the look of a rooster's comb. I and others have asked many Sherman experts and no one knows what function it had. To the best of my knowledge it is overlooked by all photo-etched Sherman parts sets produced to date, even though it is a common fitting on late M3s and the M4 series later in WWII. Readers who know what it is and what it was used for are encouraged to drop us a line.*

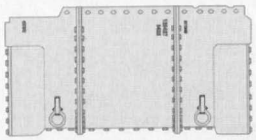
Casting number and nose type variation



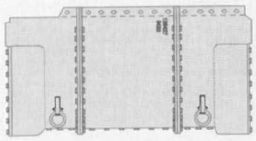
1A-1
M3, GRANT I,
M3A3, M3A4, M3A5



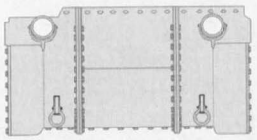
1A-2
M3A1



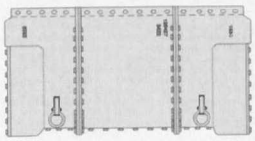
1A-3
M3A2



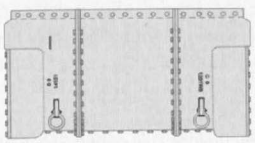
1A-4
M7



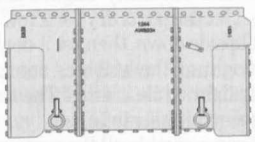
1A-5
Cruiser Ram I



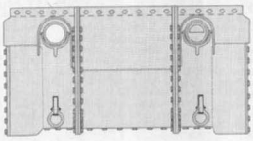
1B-1
M4A1



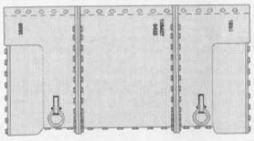
1B-2
M4A1 Intermediate



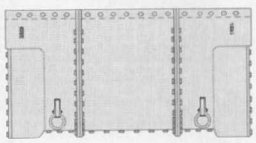
1B-3
M4A1 Late



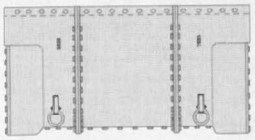
1B-4
Cruiser Ram 2,
Sexton 1



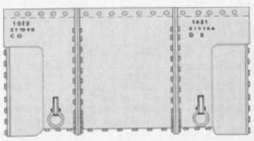
1C-1
M4,
Sherman 1



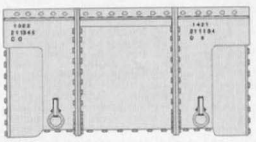
1C-2
M4A2



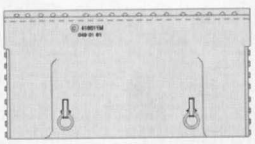
1C-3
M4A4 Early



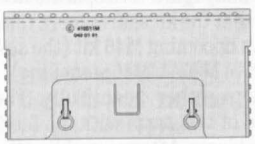
1C-4
M12



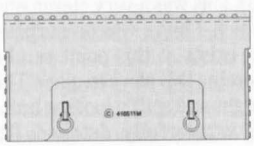
1C-5
M4A4 Late,
M4A2 Late,
Sherman V, VC



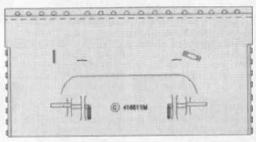
2A
M4, M4A1,
M4A3 Early



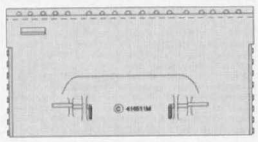
2B-1
M10, M36 Early,
Achilles IIC



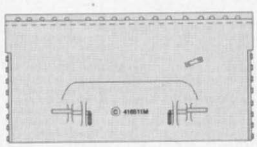
2B-2
M4A3 Intermediate



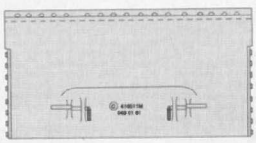
2C-1
M4A3 Late, M3A3 (105),
M36B1



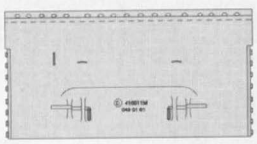
2C-2
M36 Late



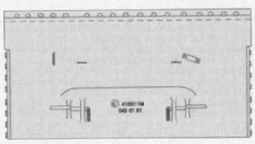
2C-3
M7 Late, M7B1, M7B2



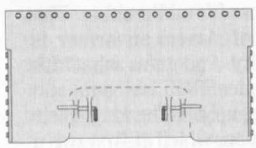
2D-1
M4, M4A6,
M4 Composite
Sherman IC



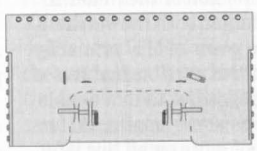
2D-2
M4 Late



2D-3
M4A1 Late, M4A2 Late,
M4 (105), M4A6 Late,
M4 Comp. Late,
Sherman I, IB, IIA, IIIAY,
Sherman Hybrid I



3-1
M4A3E2 Early



3-2
M4A3E2 Late

Note: the above examples show what is possible. Other examples can and do exist.

1/48th scale
Drawn by Pete Harlem ©1995
Enlarge 137% to obtain 1/35th scale

FIGURE 6

Pershing!

Congratulations. It's a Pershing. The missing link of American armor is finally a reality. And guess what? It's pretty damn nice. DML has gone and done and bang-up job. The kit depicts an M26A1 version, which at first was a bit of a surprise. But this would indicate to me that we'll see at least one more version of the General.

If you're not all that familiar with the Pershing, the M26A1 differs from the plain 'ol M26 primarily around the gun, which on this version features a fume extractor and a single, rather than a double, baffle muzzle brake. There's some smaller differences like the travel lock, but more on all this later.

I'd like this to be more of a discussion of the kit and the vehicle than a blow-by-blow review. I'll talk about the construction, but I want to leave room to talk about the many differences in the production vehicles and also all the add-on stuff that is already available due to the Pershing's close relationship with the Sherman.

Let's Rock

The kit is your basic DML set-up of gray colored plastic. There are twelve sprues, not counting the tracks which brings the total to sixteen. The bottom hull is a loose, bagged part.

I followed the instructions pretty closely as I moved along, beginning with the hull and suspension.

The model is broken down very much like the real tank. The rear hull and final drive nacelles are separate pieces. The belly plate is separate too, which indicates to me that the kit shares more than a few parts with DML's upcoming M46 kit (the suspension sprues even have M26A1/M46 stenciling).

The hull parts fit together beautifully. The upper hull is composed of two parts with the fenders molded as separate pieces. After assembling the upper and lower hulls, the last piece is the very back engine grate (C16). This was a very clever way of designing the kit which, I hope, was on purpose. Any warp or cup that exists at this point can be eliminated by gently forcing this piece in place. The result: a perfectly straight and spiffy looking hull.

The suspension is wonderfully detailed. I'm starting to get a sense of how DML's designers approach their subjects. It seems that they tend to break down the model into smaller parts and subassemblies. This means less undercuts and greater detail and realism. The drive sprocket and final drives are particularly good examples of this. It's also a lot more fun this way!

Building the suspension was a hoot. It's also a bit of work. Many of the components were loose, so I used a liquid glue and carefully aligned all the wheels and rollers. I let the parts dry for a few minutes with the tank upside down, then set it down on the wheels. The weight of the hull was enough to keep the wheels straight while it dried. The shocks also help to keep everything straight.

I'd suggest that you assemble all the parts of the final drive at once. The kit's designers have very cleverly broken down the parts so that they realistically represent the actual tank. It'll take some fiddlin' to get them all aligned, It's worth it—they look great.

Here's a handy tip from Captain Plastic: use a track link to align the drive sprockets perfectly. Otherwise, there may be some trouble putting on the tracks. You're welcome.

There's two different "B" sprues, so watch out

when hunting for parts. You don't need to make all the wheels and return rollers. There should be seven road wheels and five return rollers. Parts are provided for two extra of each, so save some time and don't bother with them. I think one of the road wheels is made especially for the front idler position. This one should not tight against the hull, so check them all.

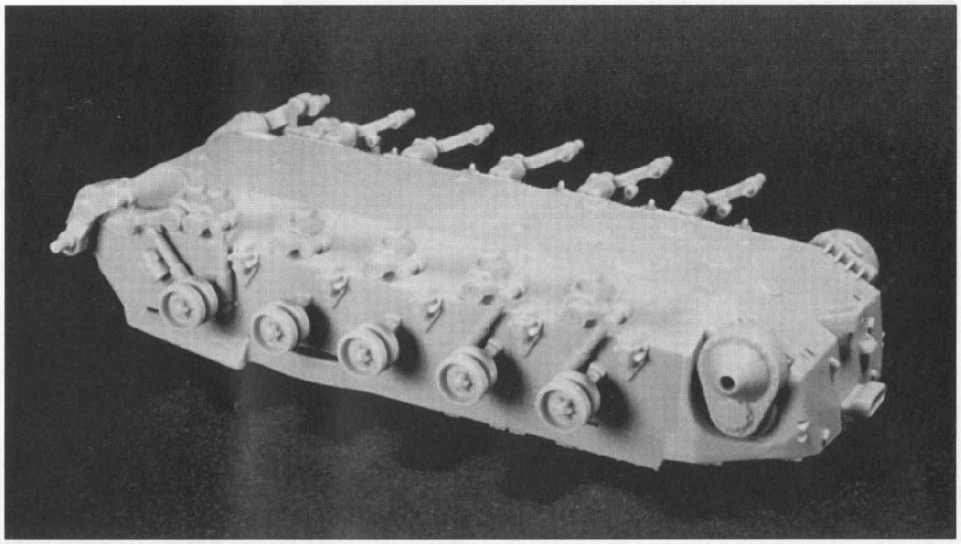
Tricks With Tracks

The tracks are, naturally, link-to-link. They represent the T-80 type steel-cleat tracks found on later M26's and all M26A1's, M-45's and most M46's. This is were the pace slows down a little bit.

Each of the center horns is molded separately and there are approximately two hundred billion of them to cut off and clean up. Each track link had a bit of a sink mark on the outside face. After cutting them all off the sprue, I decided to set aside only about thirty links to clean up completely. These would be the only ones visible at the front and rear.

I glued all the center horns on first, then I began cleaning up the leftover nibs from the sprues and the thirty-odd link faces. I used two types of superglue to attach the center horns: thick and thinner. I set them with the thick stuff and then zapped them with the thin. This set the horns firmly and allowed a fair bit of handling. I used a #17 chisel tip blade to remove the links and horns (this fits the regular #11 handle) from the sprues and do the clean-up. I pressed the blade down from above. This gave me a completely clean cut on the ends of the tracks.

I found that all the links needed a slight amount of trimming to fit together without popping apart. This extra clean-up stretched assembly time into several hours. This may not be the case with your model. While I was working on my kit, I was swapping tales with two other Pershing-building buddies. Neither of them had any fit problems with their links. Maybe I'm just extra picky. Regardless of these problems, I felt the tracks looked really good when they were complete. Maybe more so due to my extra efforts(?).

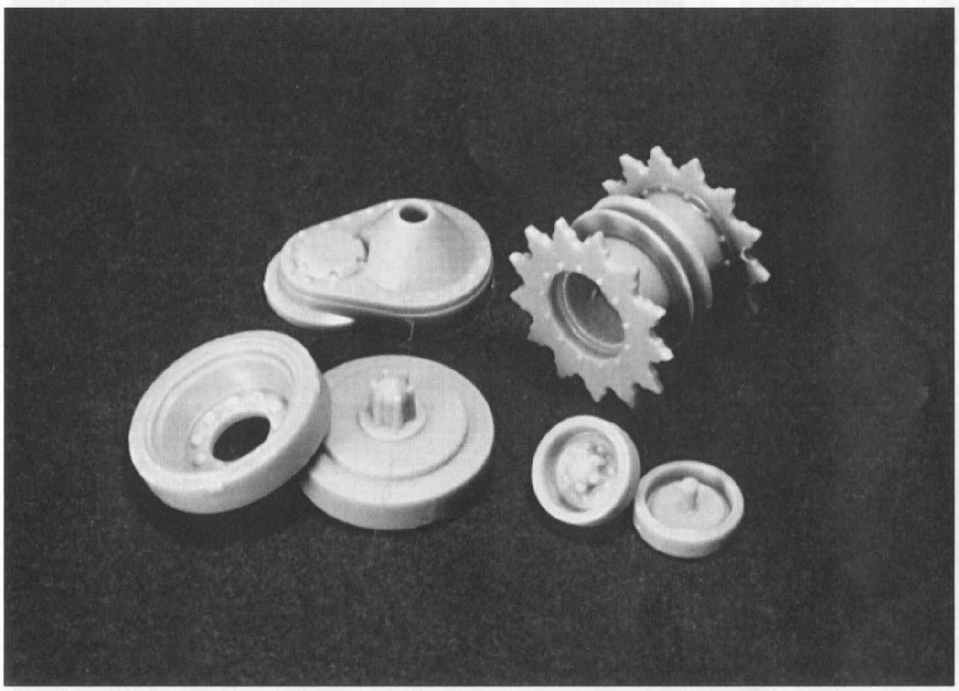


The bottom of the hull prior to adding the fenders and running gear. The detail in this area was really impressive. Check out those final drive nacelles: smack dab like the real thing.

And yes, mine are on backwards. Avoid this if you can. The chevrons should point down as you look at the front of the tank.

If you're looking for a little variety, the tracks found in the Italeri M47 do fit quite nicely. These are the T-84 rubber chevron tracks, originally developed to prevent damaging the roads of occupied Europe and Japan. These were seen quite early in Korea (Sept. 1950), even on M26's. If you want to use these on your kit, you'll need to remove four links to get them to fit.

The tracks should not really droop at all, so to achieve a nice uniform fit, I had to glue them on the tank during assembly. I usually like to lift them off for painting, but this didn't present any particular problems. I used 84 tracks for the right and 83 on the left. The number of links always differs with a torsion-barred tank. I had a bit of fit problem on the left side, where I couldn't get the links to meet. I used a half link to bring them together and then repositioned the end connectors to disguise the scene.



The suspension components. Clockwise from left: the roadwheel halves; the final drive housing; drive sprocket and return rollers.

Tasty Turret

The turret went together O.K., but I had to coax the joint together with superglue. I added small amount along the joint as I moved around the turret.

There's a noticeable seam at the front of the turret, left after installing part F2. You should fill this, but don't be too neat, as this area was a natural casting mark.

Be careful when adding the shell ejector port. This is a separate piece, but on the real tank the housing for the door was molded into the turret casting. I ran thin SG into the joint several times until it filled. Putty would work just as well.

The cast texture on the turret is rendered very well. It and the rest of the components all have the big robust feel of the real Pershie. Even though I went on to detail the turret, most of the fittings were very finely detailed and I left them as is.

One other thing on the turret. The lifting hooks on the mantlet are flat on the back, but they should be rounded. Run an X-acto around the inside a few times.

Is There A Doctor in The House?

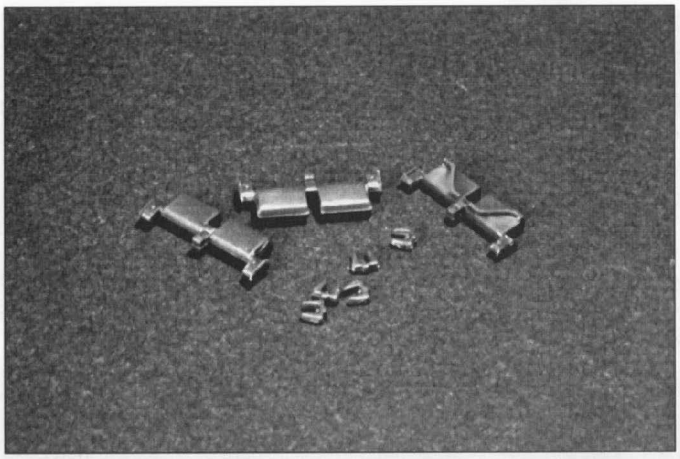
Although I tried hard to resist, I couldn't help adding a few bits and pieces. It started out as just one thing and then—well, I COULDN'T HELP MYSELF! I know, it's a sickness.

Here's a laundry list of what I did (pity me).

At all four corners of the fenders, there's a support rod. I used the kit part and added brass rods to the ends with brass attachment brackets. The kit parts were pretty good, but injection molding can only go so thin. I thinned out the adjustment blocks before adding the rod.

I removed the front part of the each fender, back-beveled and thinned down the inside edge to represent the thin sheet medal of the fender. Many Korean war Pershings had this feature. I also drilled small holes along the edge of the fenders for the sand-shield attachment points. The diagrams of the tank in the instructions show their location. No sand shields are provided in the kit.

No tow cable is included in the kit either, so I filched the heads from the DML Easy-Eight kit and made the cable from string. By the way, this kit came in pretty handy. I used the commander's hatch periscope and I also carefully scraped off the turret casting numbers for use on the front of the mantlet (#17 bit to the rescue!). The clamps and brackets for the cable came from the On-the-Mark Models brass sheet for the Easy-Eight. This sheet also came in quite handy. It has parts for the .50 cal



The track links. Notice that the center horns are separate. Way cool, but time consuming.

stowage, vane sight and some very nice periscope guards. These guards are cool. Although they're flat, they're etched to look round. I used five total. Only four come with a set, so I had to use one from a second fret. If you do a later hull and fill the inboard scopes, you can get away with only three (see below).

I used the a brass base for the .50 cal tie-down and the kit part. The .50 cal itself is the Verlinden after-market item. The kit part is O.K., but it's in a very conspicuous place, so I wanted a bit of extra detail. The VP gun makes up into a beautiful model. Two come in the set, but it's fairly difficult to build. So much so, that you may end up with only one after fiddling with all the parts.

All of the brush guards were replaced with strip brass. The parts provided were about as good as plastic can get (and still be practical), but they were still too thick.

I drilled out the antenna bases and added fine wire for the antennae. The left hand mount had a spacer bracket, I added this from brass strip and put a wire beneath it.

Paint, Polly Paint!

I'm the guy who always uses Polly-S. I was surprised to get letters and a few face-to-face comments that most folks have a devil of a time with the stuff.

The reason I was surprised is I've never had any trouble with it, either when brushing or spraying. Here's what I do:

I follow the directions. Yep. That's all. I think most of us like to deviate from the manufacturer's directions right from the get go. I know I do. I mean, what do they know? Right? Well, this is one case where it pays to read and listen. The method is pretty simple.

First, after the model is completely finished, I immerse the whole kit (and kaboodle) into warm water mixed with a little dish washing liquid. The whole thing goes in, brass, plastic and all. I just use the sink, but a dish pail would work too. This process is called "annealing" and it does NOT involved any scrubbing or manhandling of the model. Just soak it for a good fifteen minutes or so, then carefully rinse it. This can be under the tap, or by a dip in clean water.

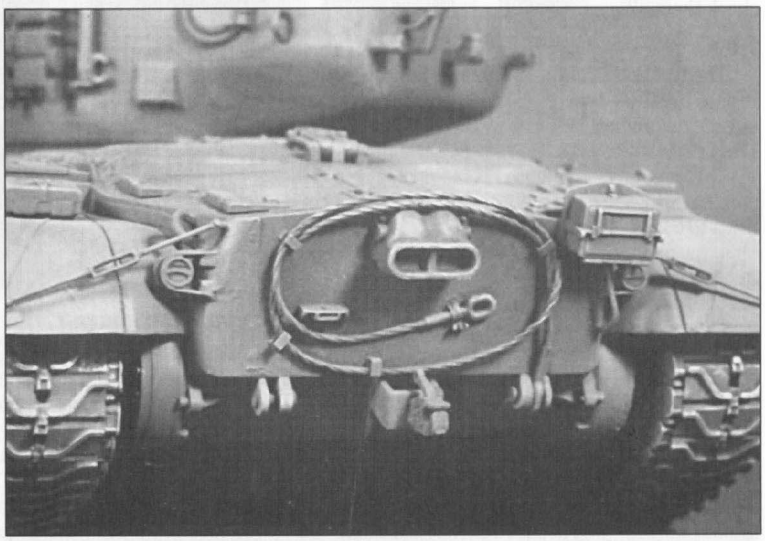
After the rinse, I blow off any excess with my airbrush and let the model dry for a few hours. I then apply liberal amounts of Polly-S Plastic Prep. This is a solution designed specifically for applying Polly-S acrylics to plastic. It removes and dissolves any mold-release, grease and gunk. I use a small, flat brush and work it carefully over the entire model. Just let the model air-dry, don't wipe or rinse it. After an hour or so, it's ready for paint.

To propel the paint, I use only Polly-S Airbrush Thinner. Some use alcohol and this gets close to the Polly-S product, but the thinner is really designed as part of a system, that if used properly, works every time.

The suggested mixture is 60% color to 40% thinner and I find this works pretty well. Your individual preferences, air source and air brush may alter this somewhat.

Using this method has yielded consistent results for me and I've never been plagued with adherence or coverage problems.

But, back to the point: I painted my Pershing overall dark olive drab. I mixed black and Polly-S olive drab in a larger bottle to make sure I had enough to do the entire tank. Post-war tanks and vehicles were painted a darker olive than that used during WWII. This darker scheme is more indicative of Army Pershings than to the jar-head version shown here (so sue me). Marine tanks were more of a medium type green, so check your references carefully.



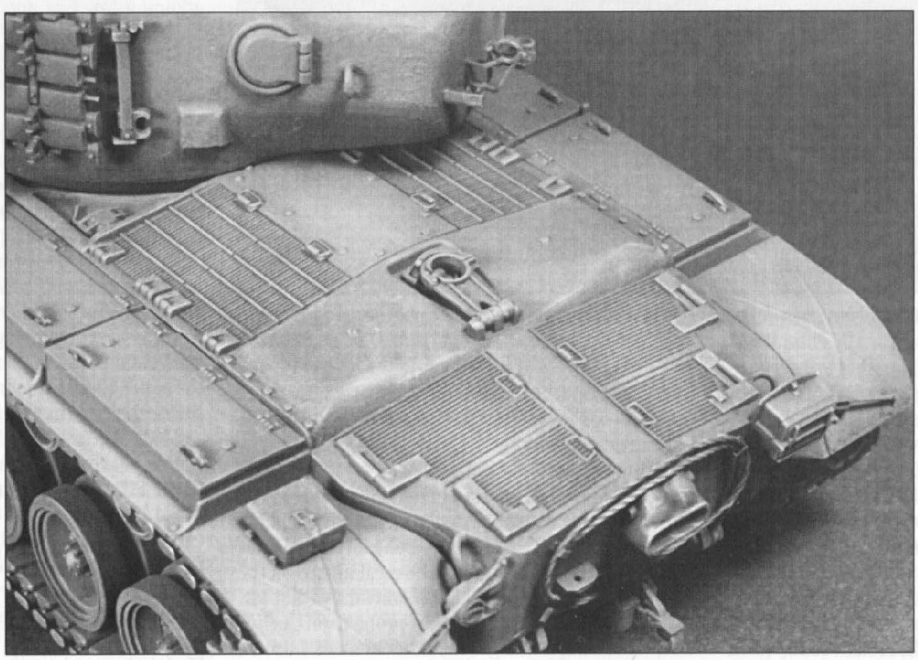
The back end of the General. This shows my added cable and detailing.

I also glossed some of the cast areas, such as the front end and the turret. This helps to adhere the decals too. I dulled the areas down slightly afterwards, but made sure they weren't dead flat

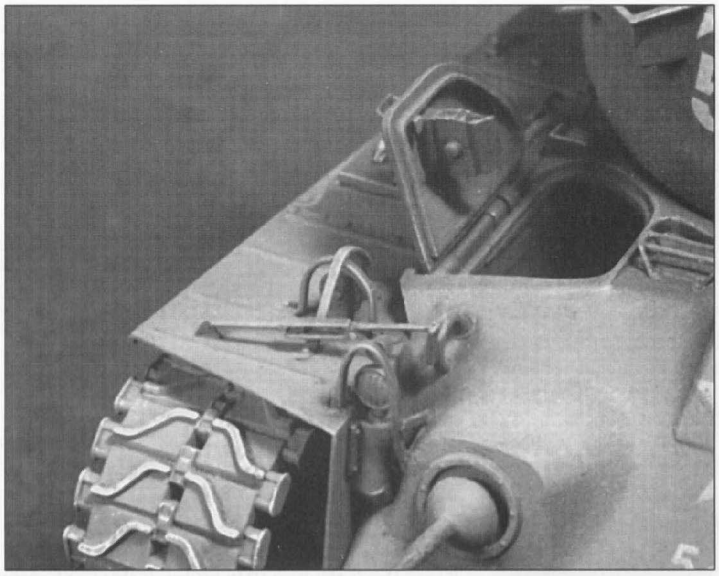
What's What

There are a veritable plethora of Pershings. There were almost as many different Pershings as there were Shermans. Even among specific types, there were several hull castings differing in details, particularly the shape of the MG bulge on the glacis plate, the ventilator bump, and the vision devices.

The initial prototype T26E3 and early production tanks had a small rounded MG bulge, small rounded ventilator bulge between the driver's and gunner's positions and the two sight periscopes in the space between the hatches and the vent bulge. This kit has the sights, but being the later M26A1, it probably shouldn't. I could only find one picture that vaguely showed them, so just to be on the safe side (and being a bit lazy) I left them. Incidentally, a smaller, rounded MG plate is included in the kit. These earlier tanks also had the big 'ol muzzle brake and the gun travel lock mounted adjacent to the rear exhaust pipe. All of the Pershings that saw service in Europe (except

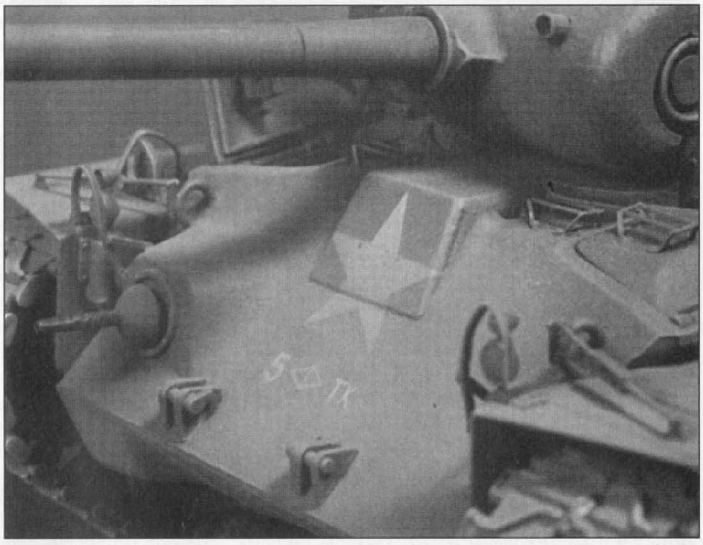


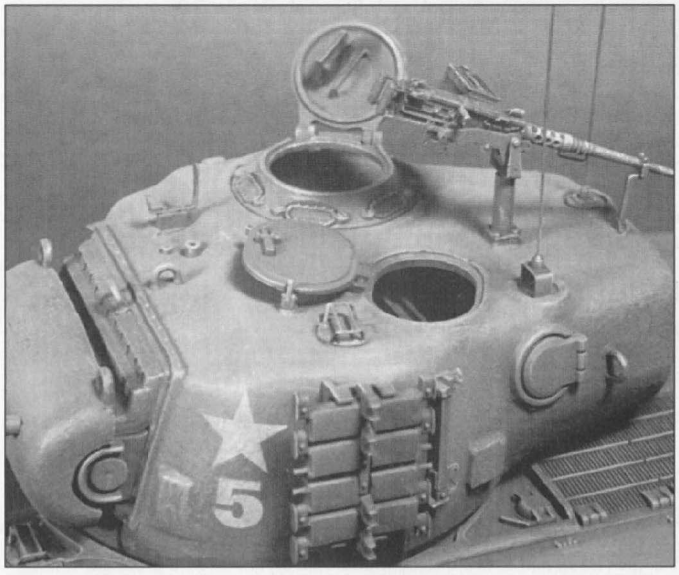
Without a doubt, one of the sexiest areas of the model. DML was not messing around when they did this kit. This was the one area I was really looking closely at, but they did a first rate job.



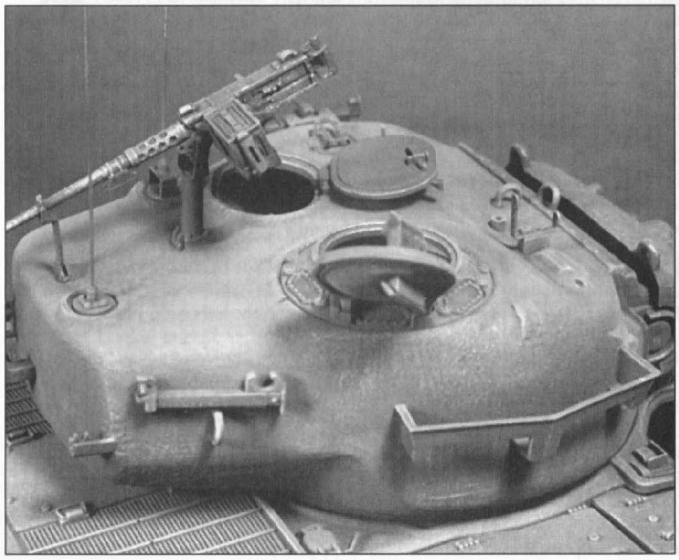
Above: the left front fender. This illustrates how the front fender flap was removed. The area was filed back sharply to represent thin sheet metal.

Below: the very robust looking front end. Compare this photo with wartime shots to get an idea of the many different hull variations.





Right and left side views of the turret. These photos show off my many added details. The commander's hatch got a periscope from the DML Easy Eight and a brass handle. On the Mark Models supplied the commander's vane sight and the periscope guard. The antennae are made from fine brass wire. The .50 cal is the VP item. Notice how fine the molded turret details are and how well the turret casting was rendered.



one) were the T26E3 early type. The Pershing was officially re-designated M26 in March of '45, but I like to refer to the early vehicle as the T26E3 to avoid confusion. Of the twenty tanks that were part of the Zebra mission,* all were T26's and all but one had the T-66 track. Photos do show one Pershing with the T88E1 steel tracks. Nearly identical versions of both these types of tracks were then in service on the Sherman. The only difference was the center horn, which was heavier and squared off on the Shermans. The one on the Pershing had a thinner and pointed center horn. Many, if not all of these early vehicles had late Sherman drive sprockets. This was the kind with the bolted-on sprocket plate.

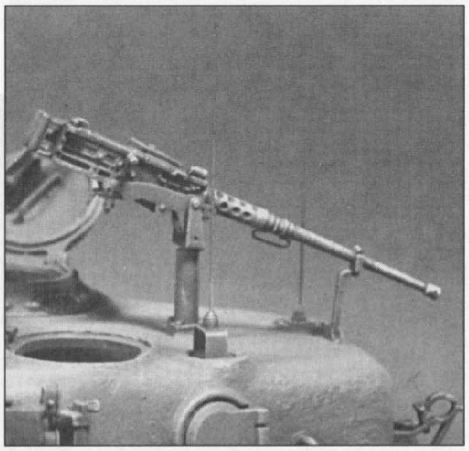
An earlier prototype, a T26E1, was upgraded with a later (and longer) version of the 90mm gun: the T15E1. This was the famous "Super Pershing" that was further modified in the workshops of the 3rd Armored Division. The main difference between the T26E1 and E3 was the Sherman-style split loader's hatch installed for the commander. The turret had slightly different fittings as well.

Second production hulls have the larger, squared MG bulge, as on the kit. They also have a larger rounded-off ventilator bulge which housed an improved ventilator (this solved bad air flow problems in early tanks). The inboard sights were deleted from this casting and the area was solid cast. These mods were probably made right on the production line as a result of feedback from Europe (M26A1s began production at Fisher in March of 1945, but none reached the troops before the war's end). Most of these tanks had the T-80 track, although at least one photo from Korea shows a tank with the T-84 rubber chevron track.

Apparently, all of the M45 assault tanks were this second type. The M45 was a 105mm armed infantry support version with weight gain in the turret (due to the loss of the big 90mm). The mantlet was beefed up to eight inches and the turret sides went from three to five inches. The M45's had a wacky exhaust arrangement that differed from other Pershings. Two pipes emanated from the rear plate and twisted around the lower hull. The whole arrangement was capped off with an armored guard. All this necessitated moving the tow cable to the right side of the vehicle. Another significant feature was the very large and elaborate canvas cover for the mantlet and main gun. All M45's wore the T-80 track and used Sherman drive sprockets.

The third type of hull is a rebuilt M26 early hull. These have the flat surfaced vent bulge similar to the one in the kit. They seem to have a bigger MG bulge also, but how that change was made is not clear. Perhaps the original vent bulge was cut out of the hull and a new larger one made from flat steel welded into place. You could call this the composite hull. It does not have the inboard sights either. The prominent lip at the bottom front of the vent bulge on the kit can only be seen on a few photos, but all were on this version. All of these were serving with U.S. or NATO forces in Europe. All the other hulls of this type have smooth joins with the glacis armor plate. This could be attributed to differences in the welding or refinishing job, or different casting facilities. The kit vent bulge needs ever so slight rounding of the edges to do this version well, but they are very close in shape. This hull also has a revised MG bulge which is rounded-looking similar to the first molding, but is in fact bigger in size. I assume the MG bulge was a weak point regarding incoming rounds and so had to be thickened. Think T-80 tracks here too.

The two bumps on the left side of the turret are designed to have a clevis-like device attached to them. This is acceptable for many Pershings, particularly the early ones, but some tanks do not have the clevis' attached. Most if not all M46's do not



The finished VP .50 cal machine gun. It was a chore to build, but it ends up looking pretty nice.

have them. The kit is O.K. for giving them to us since we can leave them off if need be.

It's entirely possible that many different vehicles had a variety of the above attributes. Post-war America was down-sizing its conventional forces in a big way, so there probably no tanks to waste. Many of the early T26 prototypes were brought up to M26 standard at the end of WWII, so it's feasible that subsequent vehicles were also upgraded as improvements were made.

OK, here's what can you build with this kit.

To do the early Pershings and ones initially sent to Korea, you keep the sights, alter the vent bulge to early rounded one, down-size and round the MG bulge, get a new gun tube/muzzle brake from somewhere, move the travel lock aft. The earlier T66 tracks are now available in the DML WWII Easy Eight Sherman. But you may want to wait on this one, because it looks like the early version is due right about now. It'll be interesting to see what's inside.

The T26E1 and the Super Pershing can be made with conversion work on the turret and hull. You can snatch the split hatch from the Italeri Sherman.

To do the second production hull you should fill in the sight depressions completely and round off the vent bulge slightly.

To do a re-manufactured early hull, then you must fill in the sight depressions, enlarge the MG bulge with putty, and if you feel like it, slightly alter the shape of the vent bulge. Early and late gun tube combos are possible so those mods may be needed for a particular tank.

Use and Abuse

One of the few units photographed using the A1 in Korea is the 5th Tank Battalion, from the 5th Marine Regiment of the 1st Marine Division. The kit decals are for tank number 5 from this unit. The instructions have the wrong unit credited, but the decals are correct as far as they go. The #5 tank (and others in the same unit) have a small marking on the front plate. It reads 5 TK. In between the 5 and the TK is a squashed diamond shape with another number inside it, perhaps the platoon number? In Vietnam, USMC armor had similar marks, but the thing in the middle was an acorn shaped shield instead. The Korean version is not the same shape as the Vietnam shape. Also missing from the sheet are the USMC and serial number marking found on the rear transmission armor plate of all their vehicles, but you can scrounge these if you want. I left this off my model, because I figured the weathering would pretty much cover it up anyway. The front end markings on my kit were from railroad dry transfers and a little hand painting.

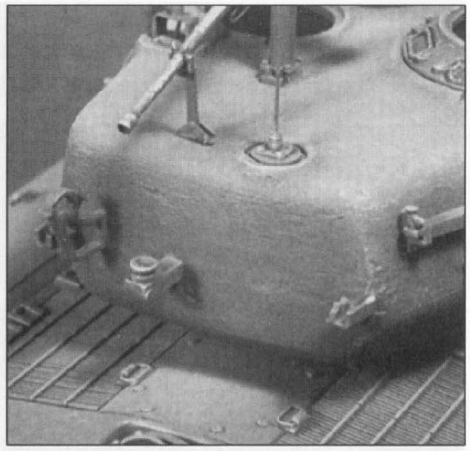
This certainly wasn't the only version used in Korea. Three M26's (T26E3) were brought in by the Army very early in the war. These were found in a Tokyo ordinance depot and they were in poor running condition. They were never properly repaired and when they arrived in Korea on July 16, they were without proper fan belts. This led to their eventual destruction, in action, on July 31st, 1950.

Marine (and Army) units continued to use the E3 type extensively. These were among the many tanks landed at Inchon. Photos show a mix of T-66 and T-80 tracks on both Marine and Army vehicles during this period. I believe the Inchon landings marked the debut of the M26A1 in combat, along with the M46. There was a great variety in the different types of Pershings seen in the early phases of the Korean War, so there's lots of modeling potential. I've even seen a photo of M46's with solid white and OD camo sporting Sherman drive sprockets. Weird wild stuff.

Sum it All Up (please)

Boy, I had a ball with this kit. It's not without its minor flaws, but they're buried in a sea of good modelin' fun. There's so many different possibilities, that I bought three kits (remember—I'm ill). The price was a bit higher than earlier DML releases, being forty, rather than thirty, dollars. This will undoubtedly be a matter of concern for our increasingly cost conscious group. The tracks are another thing that really sticks in my mind as a little on the hoary side.

These things aside, DML has a lot to be proud of here. The detail and molding of this kit was all very



The back end of the turret, with the .50 cal transport mount and the track device.

crisp and clean. The engine deck in particular was superb and the turret casting texture was nice too. I'd say this is the best DML kit yet. If this is what we can expect to see from them consistently, it's going to be a great year in armor.

Now bring on the M46!

—Pat Stansell

* The Zebra Mission was the effort by the Army to bring as many of the new weapons systems then in development into combat situations before the end of the war. Many oddball items made it over. In addition to the Pershing, the M40 "Gorilla" Motor Carriage and many of the Combat Team vehicles based on the Chaffee chassis were also briefly deployed.

MMiR RECCE

DML M26A1 Pershing. Kit number 6801. Suggested retail, $39.98.

Pershing, History of an American Medium Tank, by R.P. Hunnicut. Presidio Press. The good news: probably the single best reference source on the tank—ever. It contains not only the complete combat history of the Pershing, it also contains a highly detailed description of its development. The bad news: it's been out of print for several years. This is part of the series that includes the Sherman, the M1A1, U.S. Heavy Tanks and U.S. Light Tanks. I have a Xerox copy that I made when I checked the book of out of Georgia Tech's library a few years back. A library might be your best bet. Hopefully Presidio will re-release it in the near future. Keep your fingers crossed.

Armour of the Korean War 1950-53, by Simon Dustan. Osprey Vanguard 27. A good general reference. Quite a few photos of Pershings including a good one of the vehicle represented by the kit. Many of the photos are small, but the color plates more than make up for it. $8.95 or so, wherever the Osprey line is sold.

Armor in Korea, A Pictorial History, by Jim Mesko. Squadron Signal Publications. A really great little book for a great little price; about $8.95. Crammed with photos of all types of armor (duh!), it covers the Pershing especially well. Contains excellent shots of the Marine Pershings during the summer of 1950. Many of these were the early T26E3 vehicles with the T-66 tracks and the Sherman drive sprockets.

This book also contains a very well written and researched history of the conflict which is definitely worth reading.

Tank War Korea, by Simon Dustan. Tanks Illustrated No. 14. Arms and Armour Press. Another reasonably priced book, it contains many interesting combat shots of the Pershing. My fav: the large shot of three Marine Pershings bombing up aboard a LCT just prior to Inchon.

United States Tanks of World War II, by George Forty. Blanford Press. An excellent overall reference. Contains a chapter on the history and development of all U.S. tanks used in the war. The chapter on the Pershing is very informative and contains a thorough discussion of its combat record in Germany.

About sixteen dollars or so. It might be hard to find, try writing to Sterling Publishing Co., Inc. 2 Park Avenue, New York, NY, 10016.

The M6 Heavy and M26 Pershing, by Robert J. Icks, Colonel AUS-Retired. AFV Weapons Profile 32. An oldie, but a goodie. This one goes back to 1971 and it has a very complete history and some nice photos. Also covers the variants, like the M45 assault tank. It's worth looking for.

It cost $1.50 brand new, but I doubt you'll find it for that now. Check your local club or shop. Unfortunately, I only have the address listed on the piece which is well over twenty years old. If someone has a current source, drop us a line and we'd be happy to print it in a future issue.

My Very Own M10

Accurate Armour has recently released a whole range of various marks of the M10. These include variants with the "v" turret and the later "duckbill" turrets, both British and American, and the 17pdr Achilles. Early, mid-production, and late models can be built by simply leaving, removing the side hull studs, or removing the turret and side studs, respectively. The front studs are not to be removed in any case!

Before these kits appeared, an M10 in 1/35 just didn't exist. The Minicraft and Tamiya injection molded ones are grossly out of scale, and also was the rarely used M10A1. Italeri makes the M36B1, which is the M36 turret with M4A3 hull, and MB Models makes a resin hull to convert this to the M36. As all you Sherman freaks know, the M36 and M10 shared the same hull, except for the engine grills. (Will MB come out with an M10 turret? If they do, you'll be able to build the gasoline engined M10A1 by using their hull and the Italeri kit.) So there was no M10 to be had, until now.

The Kit

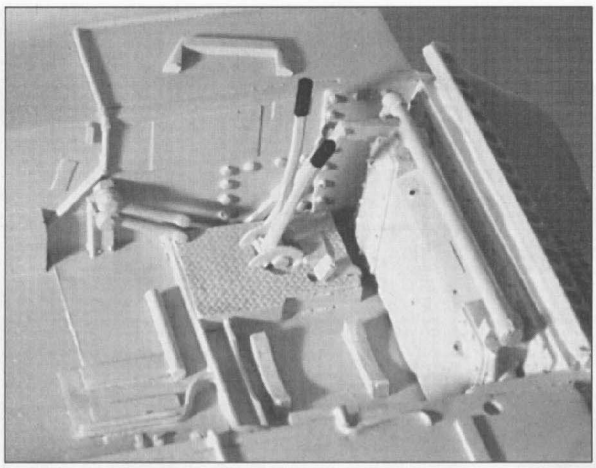
As with all of the Accurate Armour line, the molding is beautiful, verging on spectacular. Without question this is as good as any injection molded kit, and way better than most. However, you do pay for it. These kits retail in this country for $135 (more on this later), and they are not perfect. My M10 arrived with a defective turret, a 'short shot,' meaning not enough resin was in the mold. This was not repairable, so it had to be returned to Scotland; the replacement took 21 days to arrive, quite reasonable considering the distances involved and the vagaries of our post office. (You'll recall that the last AA kit I did in this magazine also had a problem; my Valentine only had about half as many track links as it needed.) This kit also had a number of broken parts, including one of the recoil guards, one seat, and one ammo rack. These were a snap to fix, and this type of thing is to be expected with resin kits.

All the running gear except the tracks and the top skids on the bogies is metal. Stand by for a couple hours of filing to clean up everything. When I first took the bogie wheels out of the bag, I compared them to a Tamiya one. The metal ones measured about .015 bigger, which is what my eyeball also told me. Don't worry, though; after the wheels are cleaned up they are exactly the same. I had so much excess metal I could barely carry my trash can out to empty it. The bogie castings, in contrast, had almost no cleanup to them.

Also included is a photo-etched fret, mostly concerned with the grouser racks and light and periscope guards. Something new to Accurate Armour is a sheet of dry transfers, with markings for several vehicles. A separate instruction sheet goes with the transfers. As for the instructions themselves, once again (like the Valentine) they're kind of muddy. The photos are not very clear, and there's no way to tell what some of the parts are (unless you know just what a "side link" looks like).

Construction: Interior

I started with the lower hull. For you real detail freaks, this one's for you. The driving and fighting compartments are fully detailed. I'd prefer that a less expensive model without all this stuff be offered, as most of it is invisible once the turret

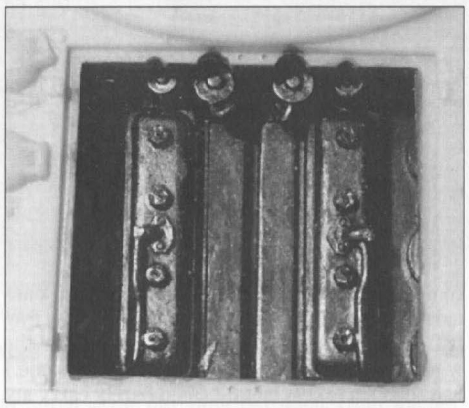


Beginning the interior build. Visible on the far wall are the seat supports, shorn of their seat mounting pins and glued in parallel to the wall.

goes on. In this case, I went ahead and did the interior. You'll have to paint as you go; the driver's area should be white (I used Pactra camouflage gray, which is kind of dingy white). What is visible from above through the open turret should be OD. The seat cushions and the fiber shell cases (the shells aren't visible in the sponson racks, so don't paint them brass) I painted Tamiya khaki.

Some of the detail is needless. Trying to install the seats with their seat supports looked trying and absurd to me. I chopped off the end that fits the seats, and glued them into the hull sides, making sure they were parallel. Then I put the seats in against the supports. There's no way that you can see this even with the upper hull off, as the seat cushion overhangs the supports.

You'll have to cut a little notch in the fighting compartment floor to fit the shaft end unit. I found this out by dryfitting the ammo racks and the floor. The racks line up with a part of the rack that's cast into the hull side; the other end of the rack fits against the rear wall of the compartment. I saved the really nice canteens to stow on the turret, since they'd have been invisible if placed on the hull wall. I must say that the interior looked terrific when done. I even broke my rules and left the driver's and radio operator's hatches open so some of it could be seen.

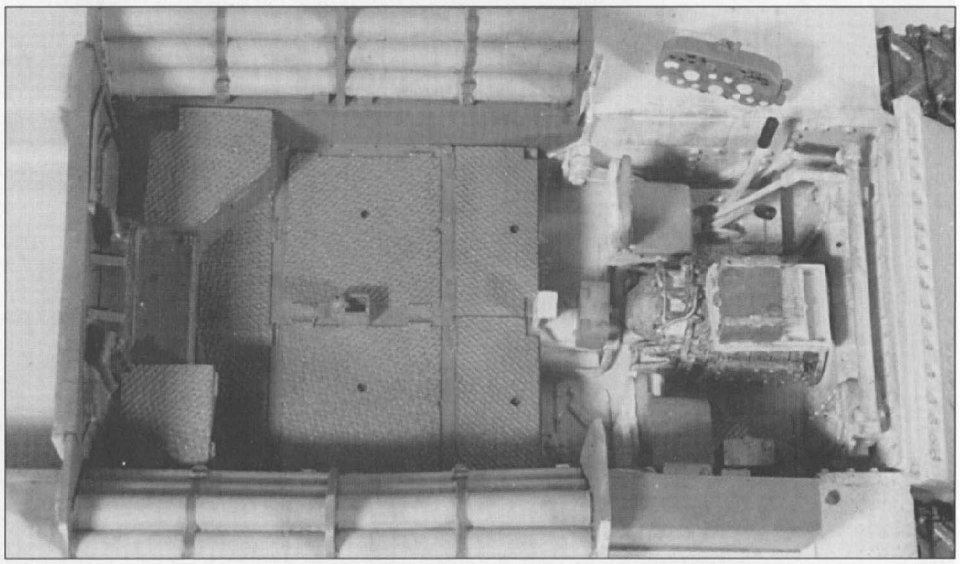


The engine pack, showing the heads of the GMC diesels, in place. The only view of these available, since I glued the engine deck hatches in place.

Running Gear

There's nothing difficult about the bogies, drive sprockets and idlers except the afore-mentioned cleanup. Anybody who's built a Tamiya or Italeri Sherman (and hasn't everybody?) will know just how all the parts go. All the metal adds considerably to the weight; I strained myself twice moving it around.

The tracks are a different story, though. There's a lot of cleanup and the joint where the sections mate was defective in almost all the pieces. They're also warped, so when you get the three sections together like the instructions say, it looks like a banana. Not to worry as long as you get the bogies and idlers securely mounted. The tracks are flexible enough so that they'll straighten right up when you get them on.



Interior shot. Visible is the notch cut in the floor for the shaft end unit. Also seen is the painting on the instruments, radio, controls and storage box as well as the transmission.

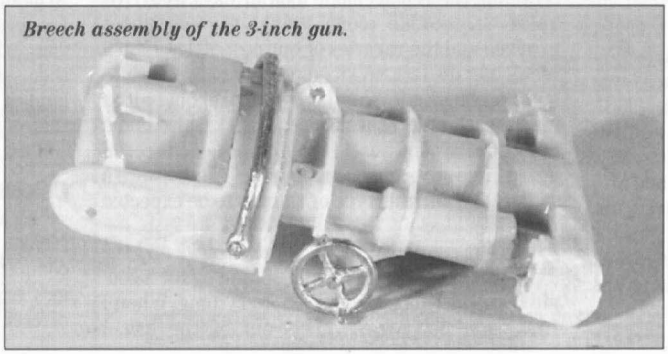
I also found out while wrestling the tracks onto the hull (there's very little if any clearance between the tracks and the sponson bottoms) that I built this thing in the wrong order. Build the running gear and install the tracks before you do the interior. Then you'll have a lot bigger area to grab onto while you coax the tracks through. I broke off a couple of the interior parts, and there isn't much room to put them back with all the stuff in place. Without the interior, there's a nice flat area on the hull top to rest on while you cut and fit the six or seven shoes needed to fill the gap on the bottom. The tracks responded quite well to bending with a hair dryer.

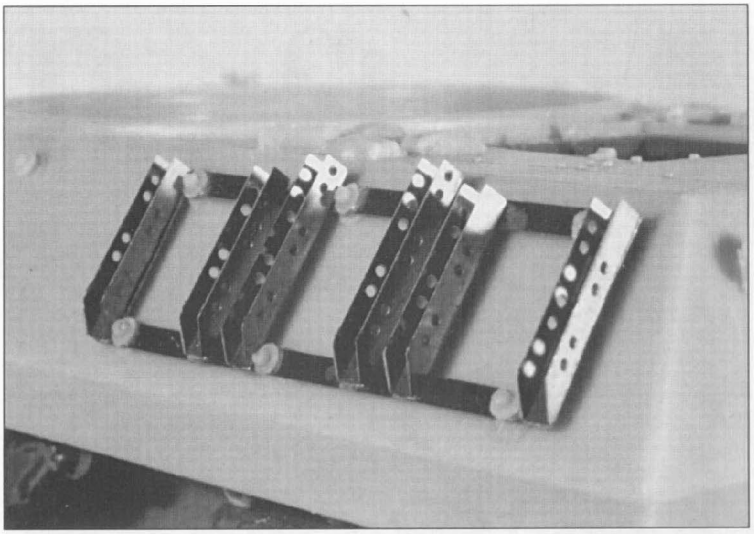
At the hull rear, the exhaust cowl had to be sanded at the top edges to fit its slot. It looks great in place; an alternate would be to fit mufflers and exhausts from Verlinden's M4A2 hull plate. The AA tow hitch was unusable, being detailed on one side only. I substituted a Tamiya one.

Mating the upper and lower hulls was a nightmare. I'd been extremely careful to get all the interior parts that could conflict with the upper hull in just the right places so I wouldn't have any problems, but something didn't work; the frustrating part is I never could figure out just what the problem was. I ended up by using my Dremel and grinding wheel to take a little off the top edge of the fighting compartment bulkhead and the tops of the shell racks, and cutting relief areas for the forward corner of the radio and the cross shaft. Sounds easy, but this process involved about eight hours of dry fitting. I bet I had that sucker on and off two hundred times!

Once I got the hulls together, I went on to put all the external bits on (remember, I was waiting for the turret to return from Scotland). First I did the grouser racks. These fit on the last six pairs of hull studs, and six of the holes in the brass frames line up with the bolts. One set of holes doesn't line up with anything, and this is not explained in the plans. You have to cut the bolt and washer off the relevant studs; use a sharp blade, and be careful. I managed to cut all twelve off, and not lose any, at the price of just one minor gash on my thumb (easily fixed with super glue). AA does give you some extras in case a couple dive into the carpet. Mine were bent up a bit, but no problem to straighten. The holes make gluing these in place a snap; I used gel super glue on the center studs, making sure the racks were straight. Then a drop of regular glue, through the holes onto the studs, did the rest. Sand the back of the removed bolts and washers flat, and put them on right over the holes. Now add the upright brass parts; the long ones go in the middle. AA says to build the whole assembly on the bench and then place it. I

Breech assembly of the 3-inch gun.





A look from the rear of a complete but unstowed grouser rack.

think the way I did it makes it easier to glue. Add grousers if you wish; they're difficult to get off the resin block intact, and some were impossible to clean up. I ended up with 22 usable ones. In a lot of photos the racks are empty.

The lights and their guards were next. I was missing one headlight, but a set of spares, intended to be put in the hull interior, are provided and I used one of them. The guards will be nothing new to those who've used any of the aftermarket brass sets for a Sherman (and hasn't everybody?). They're quite flexible, so it's easy to fit one side or the other, then fix the opposite when the glue dries. I didn't use the periscope guards; they appear in almost none of the 'in use' photos. A little length of brass wire was also furnished; I used this for the handles on the hatches. There are indentations on the hatches to mount handles, but nothing is mentioned about them in the plans.

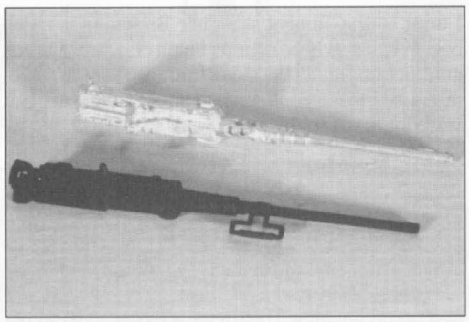
The tools are all in white metal and there is a bunch of cleanup to be done on them. For those not inclined to this sort of thing, substitute a tool set from an injection molded Sherman. The cleanup is lots easier. I then painted all the tools; gunmetal where appropriate, Tamiya khaki for the wooden parts, the base OD for the hold downs. This is not really necessary. Often in the field the tools were painted along with the vehicle, so it would be just as good to mount all the stowage and then spray the whole thing OD. I like the way they look painted individually, and they show up better on the photos.

Turret

When the wayward turret returned, it looked OK, with a couple of holes to fix on the inside. (Open turret, remember? Everything shows!) There's a good bit of flash to be removed, most of it of the film variety that only takes a brush to get, but between the turret counter weights was a solid plug that took a razor saw to eliminate. And be careful; like the plans say, the turret is fragile. This comes from AA's effort to give us scale thickness. While sometimes aggravating, this kind of effort has to be applauded.

I suppose the best way to build this is to put as many of the small bits in the turret first, and then put on the ring. I say "I suppose" because that's the way I did it, and it worked to a degree. The problem is that the ring is a tight fit, and in tweaking the turret to get it to fit, a lot of bits are going to fall out onto your workbench. Then you'll have to put 'em back in, and the reason to put them in before the ring is so you'll have room to work. Put the seats and traverse wheel on before you put the ring on? Forget that. The way I got the ring on was to glue the front first, to the pieces coming down from the gun mounts (the trunnions, I guess they are). Let this set up well! Then work your way around the turret, gluing a bit at a time. Time consuming, but workable. If you try to do it all at one time, you're going to end up with the turret glued to your fingers, believe me.

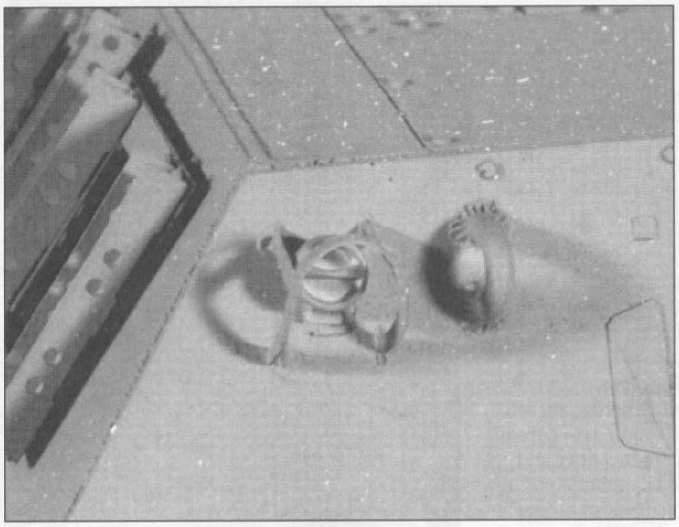
Paint the breech assembly and the shell racks separately, along with stuff like the flags and the pistol holster. It's easy to put them in before the ring, and not so easy to put them back in after they fall out (see above). I put all the little stuff in, then sprayed the interior OD, then put in the breech and shell racks. I used Polly S "Metalline" brass for the shells (and the machine gun ammo in its box) and they really turned out nice. This is terrific paint, with one coat coverage, and it looks like brass to a T.



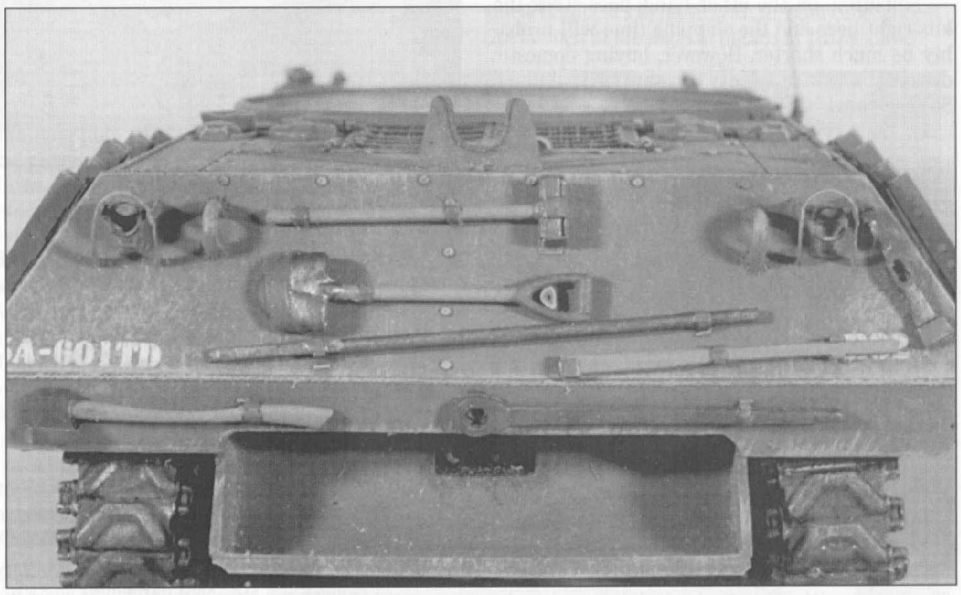
The Tamiya .50, painted its preliminary black, versus the rough white metal AA gun.

The cover supports on the brass fret are nice and look good on the turret. You'll have to carefully use your knife to open up their mounts; the brass parts are just about the size of an X-acto blade, so this is easy. Then you can just slide the supports into the tiny slot you've made. The outside rear ones stick out where they're quite vulnerable, so they were the last things to go on the vehicle, after the turret was mounted.

I was disappointed with the kit .50 machine gun. I wish AA had taken a bit more care with this than with some of the invisible stuff like the seat supports. I guess you could make the gun usable, but I didn't feel it was worth the time, a good two hours of cleanup at a minimum. Again



A taillight in place complete with its guard. The photo-etched parts were nice, and easy to use. Note the beautiful weld detail around the lifting hook.



The rear of the vehicle, sans turret, showing the U.S. tool stowage.

I went to the Tamiya set; their Browning is much better, and nowhere near as much cleanup. The AA gun mount was little more than a lump of white metal, so the injection molded one (I'm not sure if it was Tamiya or Italeri) was used.

Paint, Markings and Stowage

The whole vehicle was sprayed with Pactra OD. This paint much more accurately matches a worn and sun faded tank; Tamiya's OD, by contrast, is closer to new, out of the factory paint.

I painted the hull first, masking off the hatches and turret opening. The turret is easier to paint off the vehicle, and again you've got to mask that opening in the top. After the markings, I drybrushed with a dark tan mix, which picked out the highlights nicely.

I didn't much care for the AA dry transfers. They took an excessive amount of scrubbing to get them to adhere. If you use these, be very careful! Peel the backing a little at a time, checking to see if the things are holding. Something else I didn't like was that the big stars were not quite right in their shape. I don't know just how to describe it, but they just didn't look right. Since you've probably got either Verlinden or PreSize stars in your stuff, I'd use those.

As for the stowage, I used the spare wheels on the glacis. A Verlinden tarp matched right up with the turret hold downs, so on it went, along with a Tamiya pack and Italeri entrenching tool on the other side. Some ammo boxes (Verlinden) and the AA canteens went in the holes in the turret counter weights, and this baby was done!

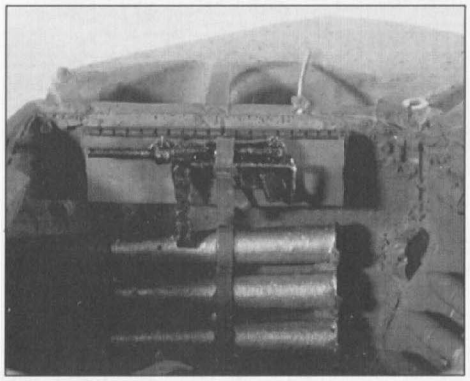
Conclusions

This is an excellent kit, just as we've come to expect from these guys. Everything scales right out on the money, and the finished model looks just great. I definitely recommend this offering.

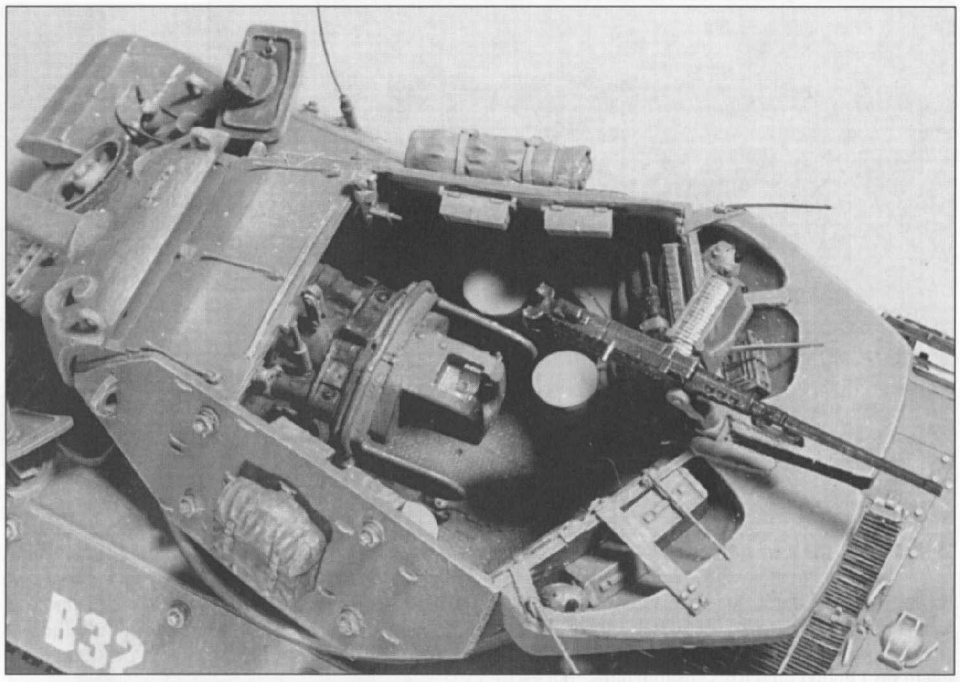
This particular kit is available directly from AA or from Squadron Mail order. Ordering directly may save you a few bucks... IF: you have a credit card; if you don't get tagged with extra duty and if you don't mind spending a dollar a minute calling Scotland. By ordering direct you can also order the tracks you want; AA offers twelve different track sets for Shermans, including the three bar cleat you can't get anywhere else.

Squadron, on the other hand, does stock the kits right here and the shipping time will probably be much shorter. However, buying domestic does cost an extra twenty to twenty-five dollars. So go get one!

—Joe Morgan



The turret with shell racks and M3 grease gun mounted on the previously bare mount.



Above: looking down into the turret; note stuff in the cavities. Below: rear three-quarter views showing tool and grouser stowage.

MMiR RECCE

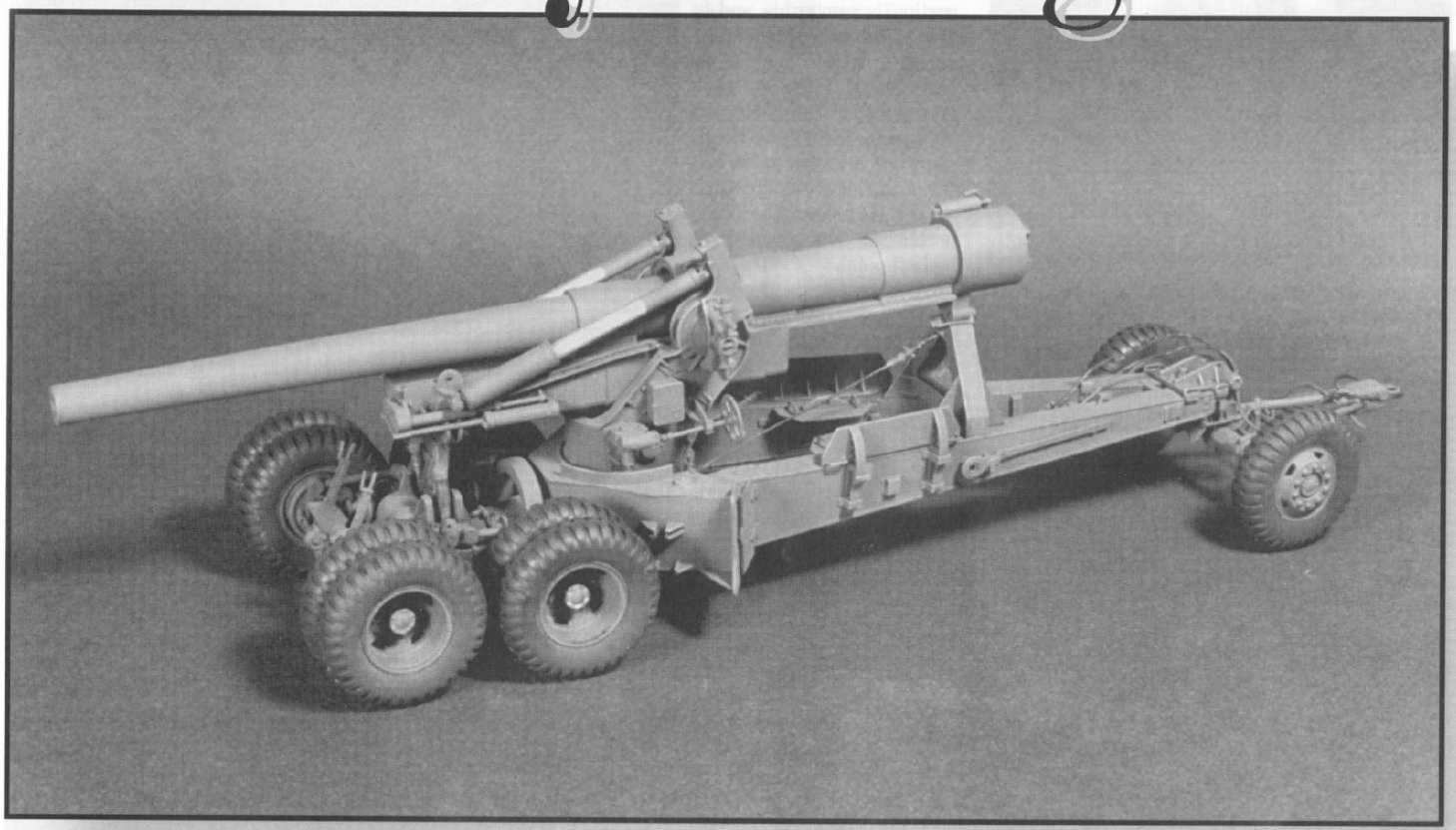
Accurate Armour US Army M10 3" GMC (Early Turret). Kit K26. Purchased from the manufacturer, Accurate Armor, Ltd. Units 15-16 Kingston Industrial Estate, Port Glascow, Inverclyde, Scotland, UK PA14 5DG. The price was £63.50, minus 14.9% for British VAT, for a final cost of around eighty US dollars. I ordered the kit at a time when orders over £250.00 were entitled to free shipping. These orders are now subject to a flat £25.00 charge, but a single kit such as this would cost £16.00 (about twenty-five dollars). All shipments are by Air Mail. Payment was by credit card (via fax: 011-44-475-743-746) and delivery time was approximately ten days.

References

Sherman, A History of the American Medium Tank by R.P. Hunnicut. Presidio Press, Novato, CA 1978. To know it is to love it. Big and expensive, it's hard to beat. Recently republished, look for it at specialty booksellers like Squadron Mail Order.

British and American Tanks of World War II by Peter Chamberlain and Chris Ellis. Arco Publishing, New York, 1981. An oldie but a goodie, this is an excellent general reference. A must for all allied armor enthusiasts.

The Story of Long Tom



The Club's latest is a very nice kit of the famous "Long Tom" gun with full carriage and limber. Arguably the second most famous artillery piece from WWII, with nods to the German 88, the 155mm gun was used extensively in that war by American and British forces. At that time it was known as the M1, but was later re-designated as the M59 to avoid confusion with it's bigger and more accurate brother, the 8-inch howitzer (M1 also, later changed to M115). Curiously, it is nearly impossible to find anyone calling it the M59, the M1 designation stuck real good.

The tracked version, the M40 would eventually make it to Korea, but only the towed 8-inch howitzer version remained in U.S Army service. The M59 was exported widely in the 50's and it's use by Taiwan is one reason why AFV Club molded it.

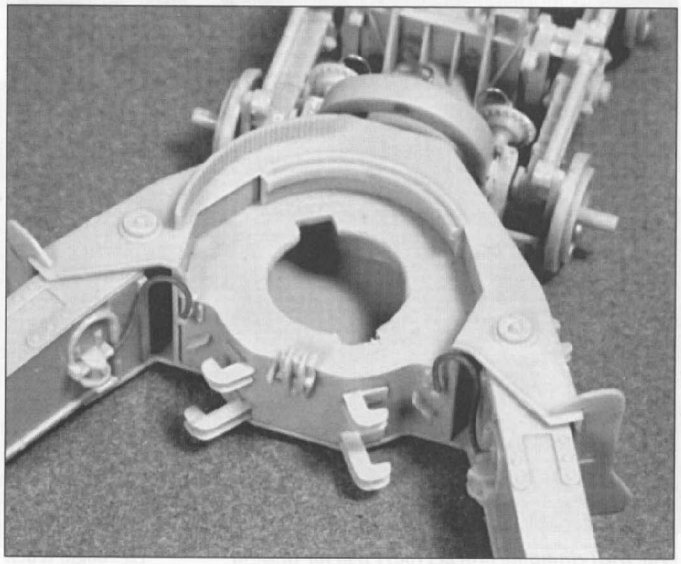
The kit has 220 pieces, all in tan styrene except for 10 vinyl tires and a turned aluminum gun barrel. The latter is nicely spun and adds tremendous value to the kit, but it also adds weight and makes it difficult to drill out any further (unless you're lathe-afflicted). The wheels and tires are late 50's or 1960's pattern and will be one of the criticisms of the kit in reviews elsewhere. The wheels should all have six, rather than five lightening holes. The tires appear to be a post-war tread pattern. I encountered a photo of a British gun used in Italy in 1944 using a very similar pattern tire so the WWII modeler could go that way. Sorry, but my reference is a Xerox from some unknown book.

Buildup starts with the gun tube and breech parts. The breech block is quite nice and can be posed closed or open. The metal gun tube fits between two rear barrel halves. You can attach it without glue, but since the weight makes it droop slightly, superglue is recommended. Detailers note that many WWII guns have retracting eyes mounted on top of the breech assembly and on top of the barrel thickener closest to the muzzle.

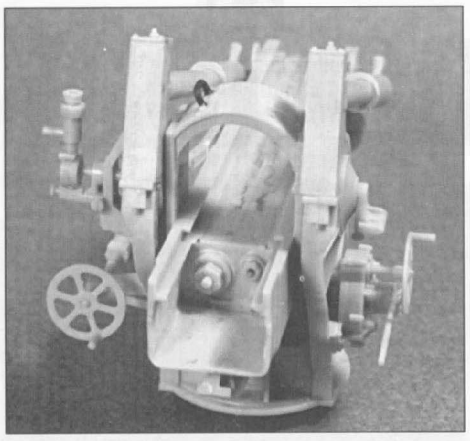
The recoil assembly builds next and goes together well. Note the holes in the back plate (part C25), these are the outlets for the recoil piston rods which are omitted from the kit. When the gun tube is in firing position, they are covered, but when it is retracted for travel, the retaining nuts on the end of the piston rods should cover these holes. The nuts are molded onto the fitting on the bottom of the breech, so you can cut them off and reuse if you pose it in travel position. I used large nuts from the VP resin product.

Part C15 is the elevation compensator piston that provides variable recoil function. The skinny rod part of it moves in and out of the thicker piston part when the gun tube is elevated, this action is driven by the variable recoil rod (part C20). Making these parts function when the tube is raised would be an interesting challenge. Another fix to make for travel position is to fill the seam gap between parts C39 and C38. Otherwise, the top gap is visible when the tube is retracted. This is evident in the accompanying photos.

The top carriage is nicely molded and builds easily. Make sure not to glue the pinion gear (part C46) or else the tube will not elevate. Part C19 is the mount for the direct fire sights which are not provided. It appears to move with the gun tube since it can be seen at an angle in photos of firing guns.



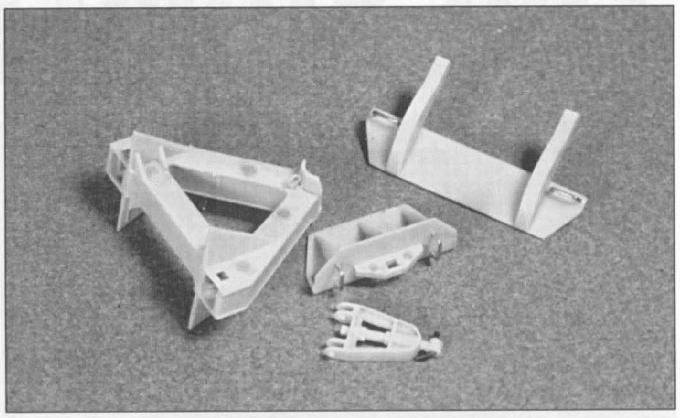
Lower carriage. This shows my plumbing job on the inside of the trail arms.



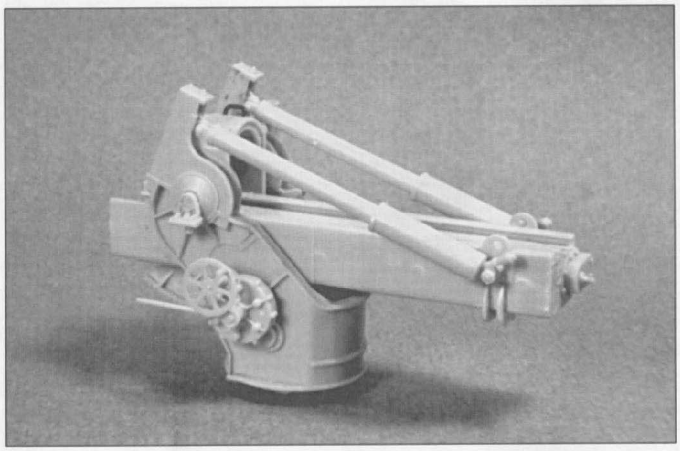
Upper carriage assembly and recoil mechanism. This shows the relocation of the retention nuts for the two piston rods. This is essential if showing the gun in travel mode. Note mods made to the sight for travel.

Part C40 is the panoramic telescope sight used to fire the gun indirectly. Note that on the real gun the upper portion is removable and is always taken off the mount during travel to keep from damaging it. I cut mine off and drilled a small hole in its place. Also, for travel, some guns had a tube rod running between the tops of the trunnions that supported the dust cover at it's highest point.

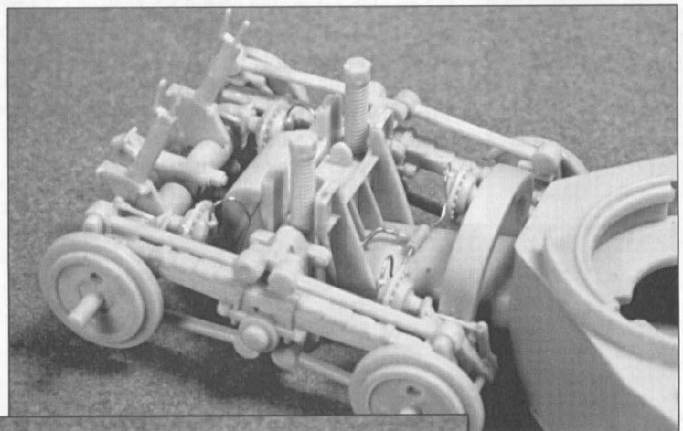
The gun tube is supported on the recoil mechanism by two large pistons. The fit on the inner portion (parts C12) is tight, so sand it lightly to achieve a working fit. Remember that you'll be painting them, so you should allow for the paint thickness also if you want them to move. A portion of each C12 is polished metal on the real gun, in the area which enters parts C18, so you will be trying to simulate that.

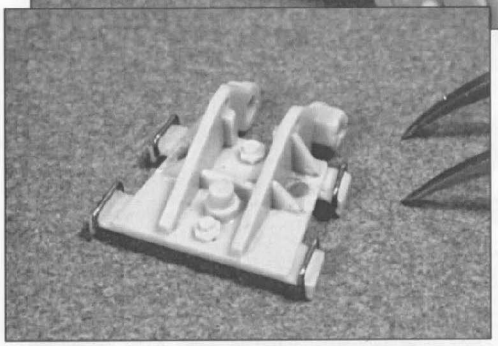


Parts grab. This shows some of the few pinholes and some of my minor brass add-ons.



Above: right side view of the upper carriage. COOL MAN! Below: overall shot of the bogie truck under construction. This shows my brass brake lines and the added T-fitting. This area is the nicest part of the model.





The trail clamping bracket (part B45 for those of you keeping score). I added brass wire handles and the nuts (another travelin' mode feature).

The carriage trails build up from just a few parts. They can be improved with several details and I added a bit of brass wire here and there to spice them up. The small tab on the limber end of the left trail (part A8) should not be the same shape as the one on the right trail. It should be repositioned opposite the right one and should have a notch in it that allows the point on the right tab to engage the notch.

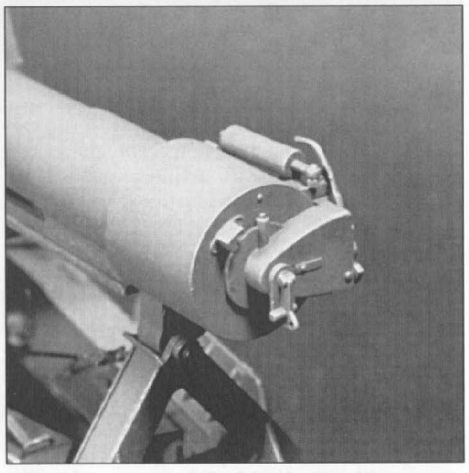
On the inside of the right trail (part A11) are two rectangular shapes. This is the rack for the gun tube cleaning rod. The rod is broken down into four pieces that mount in this rack, but it's missing from the kit.

The lower carriage assembly is straightforward unless you plan to add the lines for the air brakes (like I did). The brake lines molded onto the inside of the trails have a flexible rubber line connecting them to the two pins on part A33; I added them with brass wire. The center brake line comes out of the carriage at the pin on top of part A37 and into a "T" fitting located there. The left and right brake hoses run from the "T" to the brake diaphragms (parts B4). The outer brake lines exit from the sides of part A5 and run over to the brake diaphragms at that end of the bogie truck. Also make sure to follow the revised drawings provided in the kit to correct errors to the step instructions for Steps 6 and 7. Failure to follow the addendum will ruin your efforts.

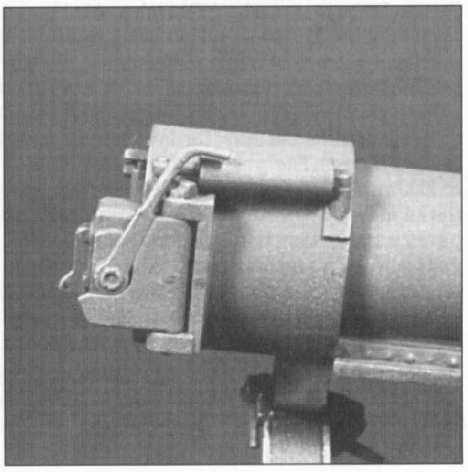
The bogie truck resembles the parts of a 5-ton truck so if you have done any 2.5 ton trucks you will feel at home here. This is the most difficult part to build however. It has numerous small parts to clean up and attach properly, and it is resistant to reshaping after you have glued everything.

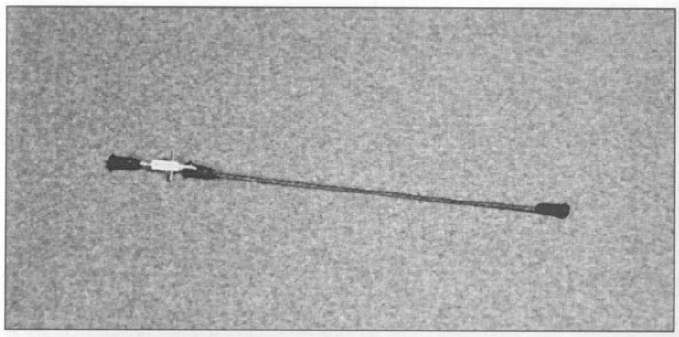
This means you must now decide if you want your Long Tom posed in firing or travel positions. Since I was doing mine in travel position, I built the limber first so that the correct angles on the torque rods (parts B7 and B8) could be determined. If you don't test fit during this, you are cruising for a bruising later on. When you go to assemble the brake drums, consider leaving parts B27 and B28 loose until you pose the bogie truck properly.

Parts B2 are the mechanical brake actuators and

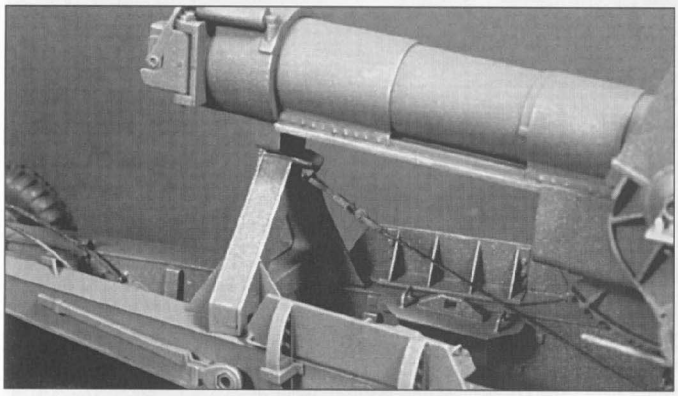


Breech block and mount details. This illustrates where I added screw heads along the gun's base.

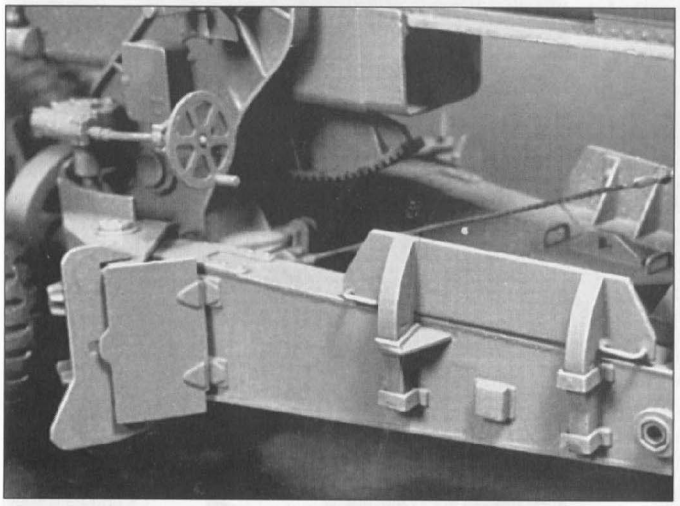




My lock down cable. It's completely scratch built.



Above: this shows the locking cable installed and the gun completely set for travel. It takes a little jiggling to get the gun onto the travel lock. At the left you can see the tubing fit onto the molded-on detail on the back of the trail arms. Below: left side of carriage showing the installation of the spades and dust door.



the rods on them are easily broken while taking them off the sprue tree, so be careful. One detail omission here are the retaining nuts for the torque control rods. You can add some after-market ones if available. I found the inner hub parts (B29) to stick out of the drums (B30) too much, so if you shave them down a bit the wheel assemblies will fit tighter. Failure to do so will not stop them from fitting since the outer wheel holds it all together anyway.

When assembling the bogie truck to the carriage you have more posing options. The truck is raised and lowered on two spiral lifting screws (parts B41). The gun can be fired with the truck in travel position, but more commonly, the truck is raised to let the carriage sit on the ground. When left in firing position for an extended period, the truck would often be removed from the carriage. Pick one before attaching the truck and adjust the position relative to the lifting screws if you chose a raised position. Don't use parts B34 & B35 if you've chosen travel mode. I'm not sure what these are. I can only assume they are some kind of brace to keep the bogies from oscillating. The weapon could not be towed with them installed.

Parts A19 do not fit well on the lower carriage. This is important because the pin on the dust covers (parts A23 and A38) must line up with the holes in A19. Test fit before you glue them on. You can add the wheels and tires at any time once the bogie truck is done. The wheels need inflator valve stems if you choose to detail them a bit.

The limber is the later style that came out toward the end of WWII. It was despised by the troops for its dangerous and difficult operation when lifting the heavy trails up onto it. AFV Club provides most of its parts, but I recommend you add the air brake lines that run down both draw-bar legs and over the clamping bracket. One line on each side ends up connected to the rearmost ends of the air line molded onto the inside of the trail parts.

Part B22 should be concave in the center of the curved arc so that a trail lifting cable can ride in the trough. You can dig this out with a Dremel bit or a rat tail file and add the cable. The fit of part B19 could be tighter at the tow ring outlets so a bit of putty helps here. Also, you should fill the dimples at the tow ring end of the draw-bar and on the face of part B19. My example had a few. These are the most obvious dimples in this otherwise very nicely molded kit.

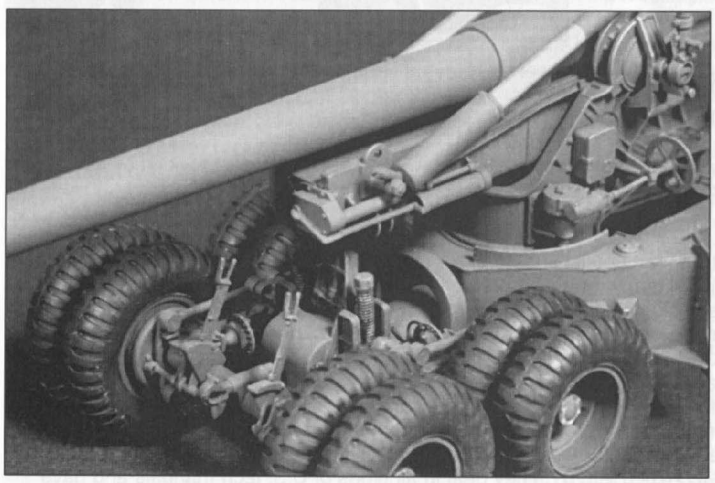
Final detailing goes into adding the spades and if in travel position, the travel brace. The front spades have two supports (parts A34 and A35) which have lightening holes in them you can add. Mold pin marks were few in this kit, but the spades were another location that had them in visible locations.

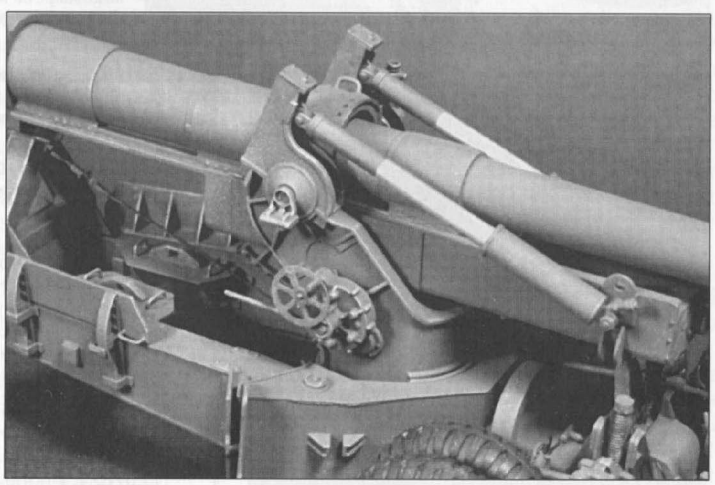
Parts A20 and A21 make up into the travel brace. One of the support "fins" was broken on our example, and the bottom profile would not give a flat fit on the gun trails until I fiddled it with some sandpaper. Also, the fit of the breech lock support into the trough on top of part A21 was not the best, so I deepened the trough for better alignment of the locking pin hole. One final detail on the brace is to add the support cable that runs from the tab at the upper front down to the tab which is left of center on part A33 (the lower carriage back plate).

All in all, this is a great model of the M1/M59 155mm gun. It is not real easy to build, so I warn beginners from jumping into it. If this describes you, buy one and save it for later.

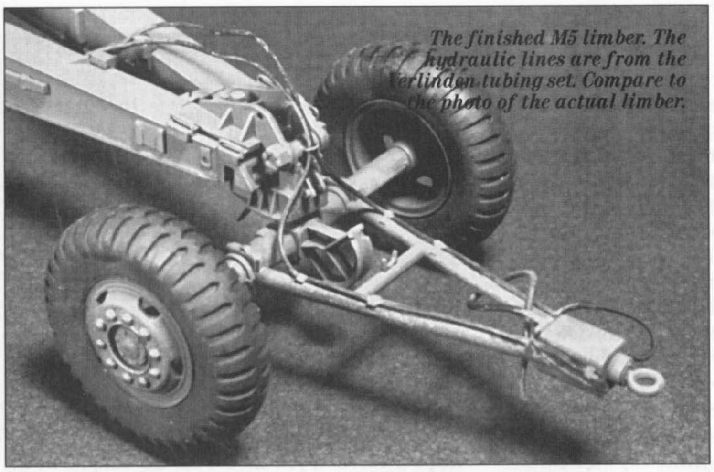
For the better modeler it offers some detailing and assembly challenges. The biggest of which is finding any reference material to study. Arty nuts and diorama builders can have a field day adding travel covers, firing equipment, ammo handling tools, and a tow vehicle. Don't bother trying to use this kit to build a M40 gun motor carriage since that is on AFV Club's "to-do" list for the future. Converters would better spend your time adapting a Verlinden 8-inch howitzer tube to the Club's nifty gun carriage. Not too bad, another fun kit from the Tamiya of Taiwan.

—Pete Harlem

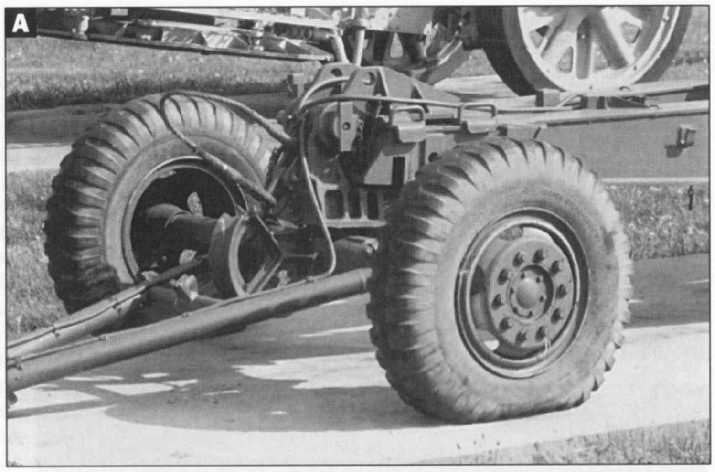


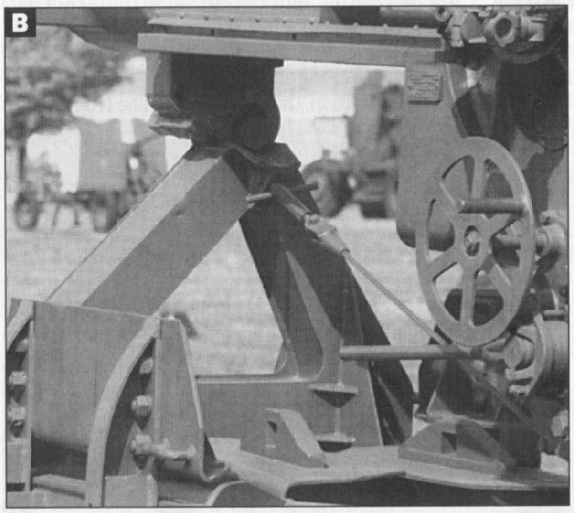


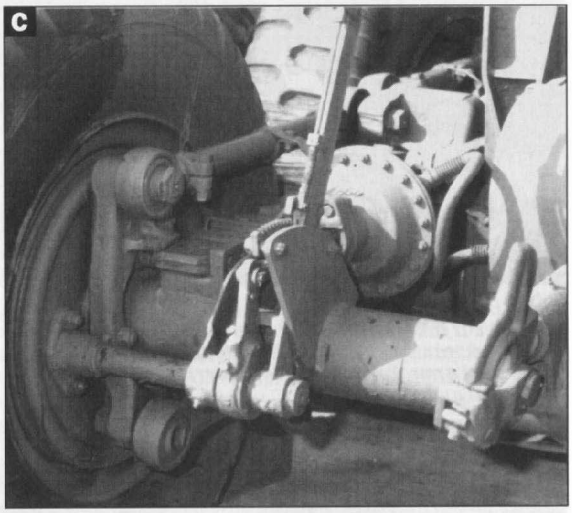
Overall views of bogie and upper and lower carriage. Note the rear spades mounted on the inside of the trail.

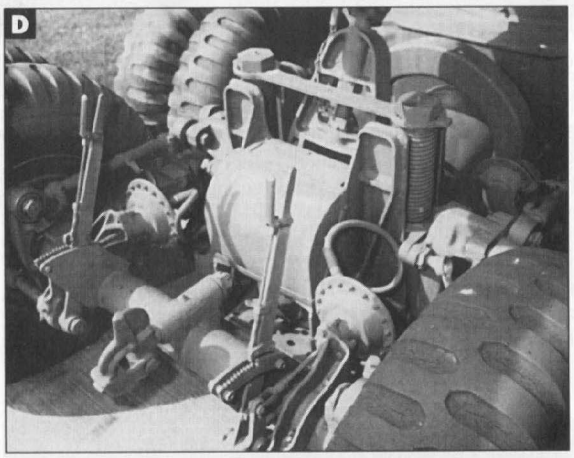


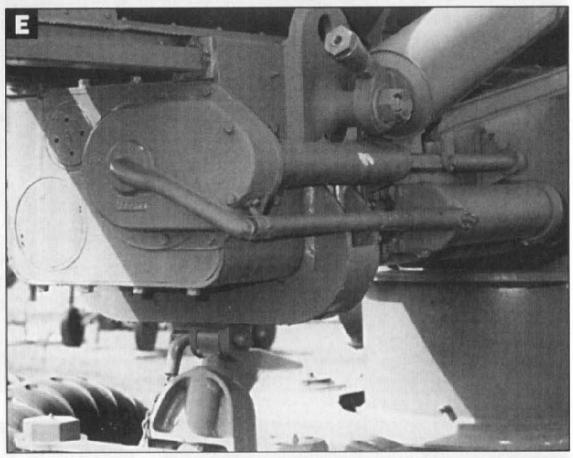
The finished M5 limber. The hydraulic lines are from the Verlinden tubing set. Compare to the photo of the actual limber.











A: Hey look! A limber. This shows the six-hole wheels common to WWII guns. Check out the detail of air-brake system as it passes over the back end of the trails. Take note also of the cable guide mounted in between the arms of the draw-bar.

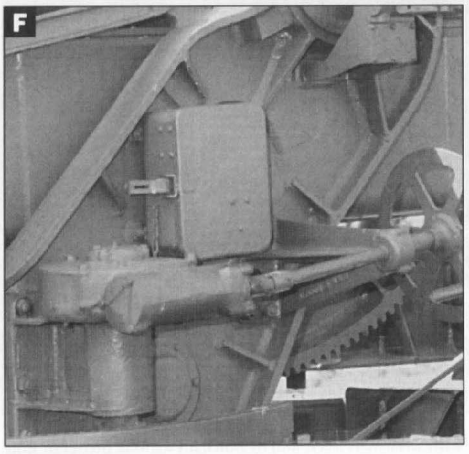
B: Detail of travel locking cable. This photo also shows the front spade. These sometimes (but not always) had lightening holes. Note the two data plates mounted on the upper edge of the right side of the upper carriage (above the elevation wheel).

C: Detail of air brake diaphragm and brake line.

D: Overall view of the bogie truck assembly. Showing the hand brake levers, air brake lines and screw jacks. The bar across the screw jacks may be a museum addition to keep the gun in place. This photo also shows a tire pattern more common to that in the AFV Club kit. Barely visible at the extreme top edge of the photo is a nipple pipe. There are several in this area of the gun and they may have been used to charge the air brake system.

E: M3 Recoil mechanism. This shows the front end of the mechanism with its various recoil pistons. Also note the nipple fitting below, and the screws at the upper left. You can see the top of the travel lock here too.

F: Left hand side of the upper carriage. This shows the panoramic telescope stowage case, traversing wheel and its mechanism. The large shape on the extreme left is the traversing gear housing.



MMiR RECCE

AFV Club Long Tom M59 155mm Cannon. Kit No. AF3509. Kit graciously provided by Marco Polo Imports, Inc. Suggested retail price is $35.98.

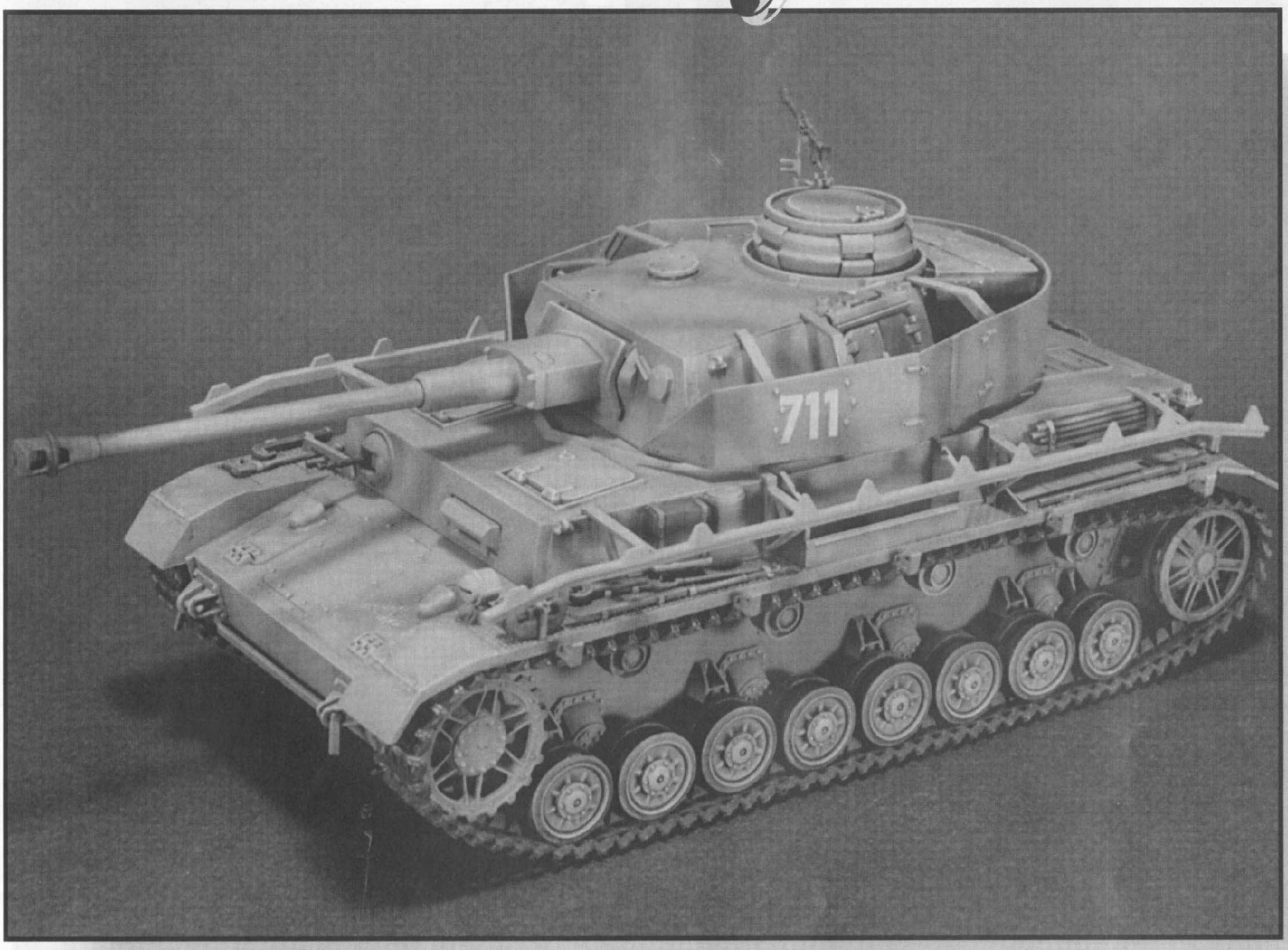
References

I hate to tell you this... but I could find no one single existing reference on the Long Tom. The stuff here should help. All of my reference on the gun was complied over a period of many years from various borrowed volumes and library books. Some it goes back fifteen years. I know this sounds like a cop-out, however I can tell you the tech manual name and number, which is: *TM9-1350, 155mm Gun M2 & 8-inch Howitzer M2; Carriage M1.* Tech manuals can be obtained through the inter-library loan system, if you can locate one at any of the Army museums. An inter-library loan system is in place for those libraries that subscribe to it. If an individual library does not subscribe, requests must be made by mail from the originating library.

One good source I know of for tech manuals is: Portrayal Press, P.O. Box 1190, Andover, NJ 07821. Phone/FAX: 201-579-5781. They deal in all types of U.S. tech manuals and have excellent connections to the military vehicle restoration crowd.

Four Play

The All New Tamiya Panzer IVJ



When I first learned that Tamiya had remastered its Panzer IV, I got very excited. I was hoping that the "new" IV would be as good, if not better, than the new Panthers from a year back. I was delighted when MMiR let me (they like me, they really, really like me!) review their sample. I have, over the years, built a total of 30 plus Panzer IV's—sort of my own personal oddessy. I was more than thrilled to have crack at this one.

Is this a new kit? YES! There is nothing from that old seventies vintage Panzer IV in this box. Everything is all new tooling. You might think that this is going to be a promo for Tamiya, but not so fast—there are one or two annoying things that bring to mind the old kit. I'll get to that later, first let's get to the good stuff.

Meine Kampfwagen

I won't bore you with a rehash of the kit's instructions. I'll just try to cover the most salient points as we go.

The kit is molded in an odd colored dark tan plastic—sort of a deep peach color. There are five sprues plus the lower hull as a separate piece. The upper hull and turret are on one large sprue, the engine deck parts on the second and another separate sprue is composed of fittings and tools (remember this later). The two remaining sprues are the suspension components. The bottom hull is a loose part. Suffice it to say, the lower hull detail is the best I've ever seen. It far surpasses the Italeri kit and the older Tamiya items. The previous kit's hull length and roadwheel problems are a thing of the past. One of the first things you'll notice, even before you begin building, is all the very finely rendered cast textures. The suspension support bars on the hull, the idler wheel mounts, the final drives, the idler wheel bases and the drive sprockets all sport that legendary Tamiya tooling. We first saw this on the Panther and Tiger kits. Others get close, but nobody does it like Tamiya does it. Well done guys.

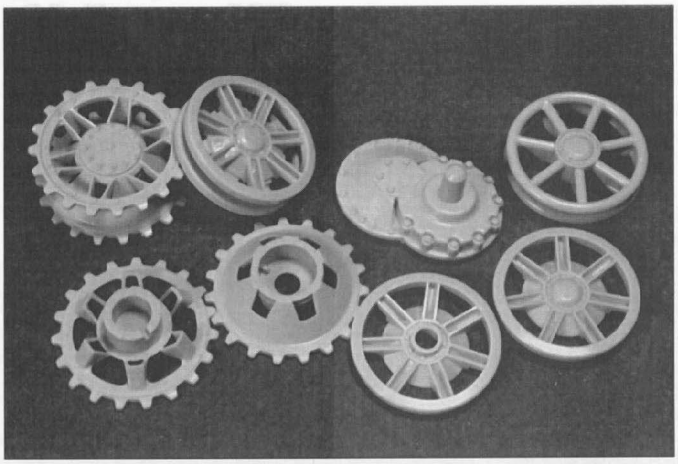
I flew through the lower hull and suspension assembly. All of the fit was terrific and I encountered no problems at all. The tracks are vinyl and represent the very late type with the solid horn. Tamiya did a pretty good job with the vinyl, but I'm sure some will be disappointed there's no link-to-link provided. Me? I'm an old fashioned guy and more than happy with the vinyl. If you have to have link-to-link, DML makes a late set that is available separately.

The wheels are all new and the tire portion has the correct thickness versus the old kit. Oddly, the spare wheels provided are of a different width than the ones for the running gear. There's no chance that these could get mixed up, as they have no mounting points on the back.

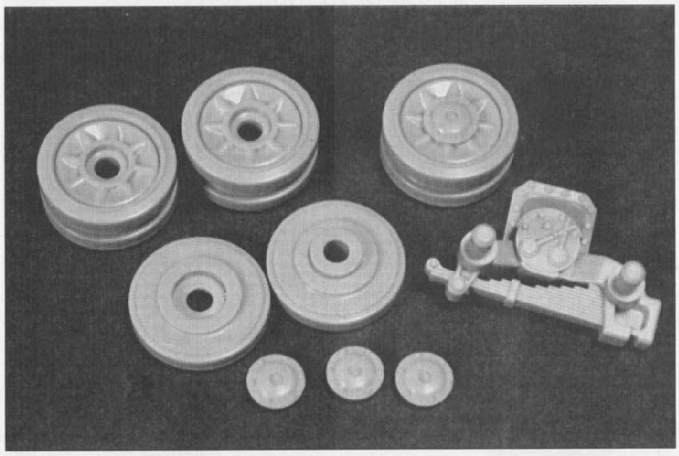
There's a choice of two idler wheels, the later plate type with the cast hub center, and the earlier tubular type. I went with the late type. This is always what I notice first on the late H's and J's.

Watch out for parts D41 and D42. These are the handles(?) mounted to the backs of the idler wheel housings. I must of knocked them off at least half a dozen times. Add them last if you can.

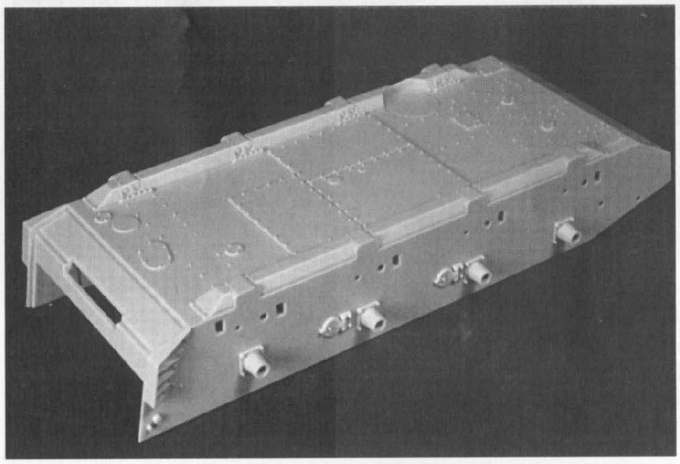
The upper hull, again, is all new. The bow plate features separate brake access hatches and the brake cooling ports are finally correct. The ball MG mount is correctly offset and the driver's and radio operator's hatches on top of the hull are accurate



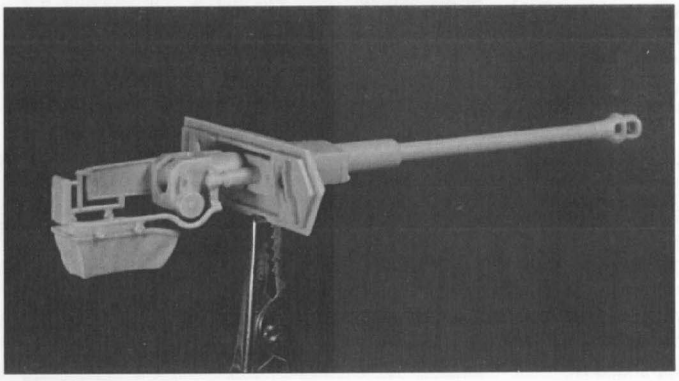
The drive sprocket, idler wheels and final drive. At upper right is the alternate idler wheel.



The bogie wheels and their mounts. Note the separate hubs.



Above: the bottom of the main hull. It's all there; every nut, bolt, panel and plug. The long rectangular mount base was even textured! Below: the neat looking main gun's interior details.



for an H or J model this time.

The engine deck features a separate hatch for the engine along with two "mystery parts" listed as not used in the instructions. These are clearly the main engine fans. However, there is no place to mount them. No engine or fan housing is provided. Given the way Tamiya has been accessorizing this kit (see Short Takes), I betcha it won't be long before we see it.

There are several clues in this kit to indicate (in this writer's opinion, anyway) that Tamiya will probably do a H model. There are two types of filler boxes provided. This a small box on the left side of the engine deck, often mistaken for a tool box. It housed the coolant filler caps. Earlier models used a slant-sided box, while later H and J models used a square sided one. Hmmm... The tow bracket is also molded as a separate piece. Possibly for easy replacement with the earlier type? Another curious feature is the separate hubs for all the bogie wheels. This could indicate an even earlier model (!).

All of the tools are provided on a sprue of their own. They all gems. The jack is finally correct, not a mirror image like some earlier kits. It's also molded without brackets. These are molded as stand-alone pieces (it goes on and on). This is also true for the S-shaped tow shackles. The bracket for each of these are topped off with super looking little wing nuts. You have the option of using these or any of the photo-etched items that are currently out there. Use those wing nuts either way. The other tools are all finely molded, but they do have attached tie downs. Incidentally, this sprue will soon be available in a slightly altered form and it will include many of the same tools along with early versions too.

The thing that most impressed me about this kit was the location of sink holes and knock-out marks. Almost none appear on surfaces with detail. If only all the manufacturers would figure this out, they could save us hours of sanding.

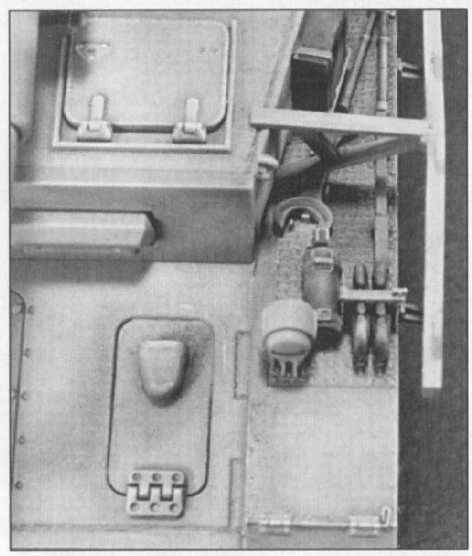
The one thing I didn't like about the kit, and this was it's one major drawback, was the open sponsons under the hull sides. What's up guys? I know you know better, all of the Tigers and Panthers had their sponsons blocked off. Both Italeri and DML provide separate fenders to solve this problem. You'd think that the leader of the plastic world would have thought of a way. Even a plastic insert wouldn't be too much to ask. I guess I'll get over it one day... maybe on the H model? I used some scrap plastic stock to block the area over and got on with my life.

While I'm bringing the room down, I should mention that although frames are included for the hull schurtzen, no skirts are provided or even mentioned. Granted, many photos show the tank without these attached, but it is a significant omission on the kit. A template would have made up for this, but again, we'll have to wait for the H to see if this is addressed.

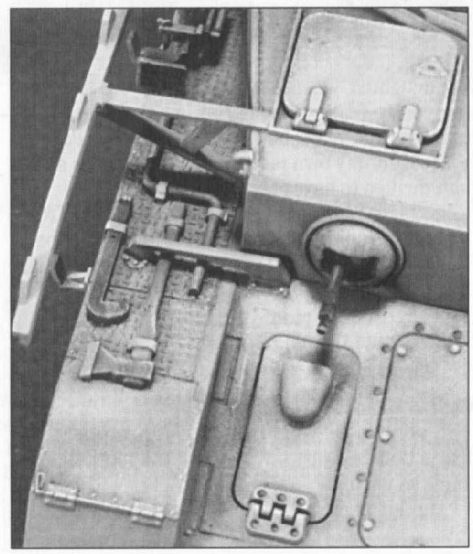
On the positive side, the rear air intake flaps are now molded as separate pieces (B15 and 16). On the old kit they were molded on the fenders and there wasn't much you could do about them.

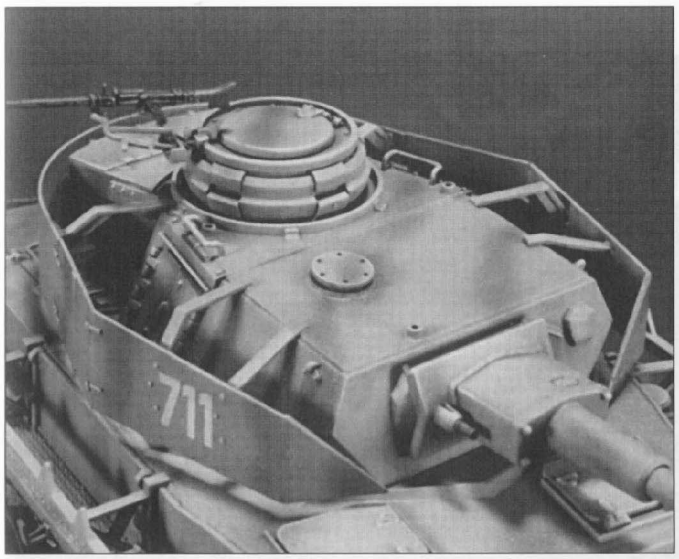
Ich lebe der turret

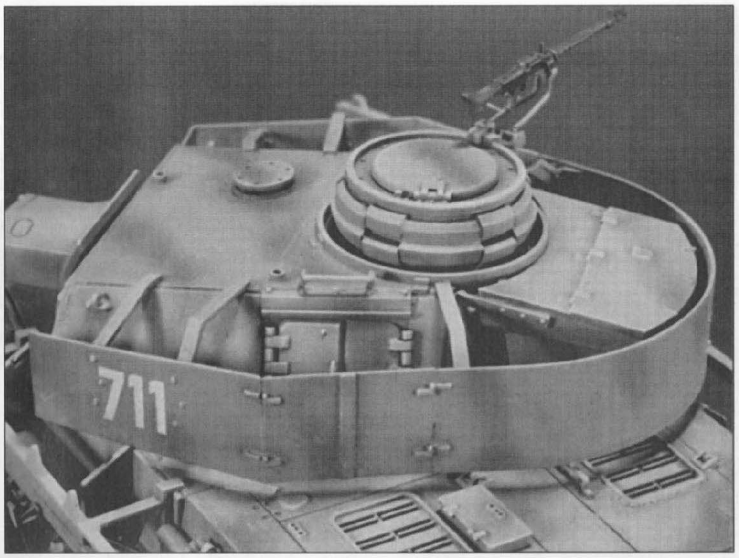
The turret features the up-armored roof, pilzen lifting mounts, separate hatches and a nice MG and mount. The turret is split in two halves along its length with the roof as the third piece. This strikes me as a good way to make these parts interchangeable for other variants. You add the hatch hinges



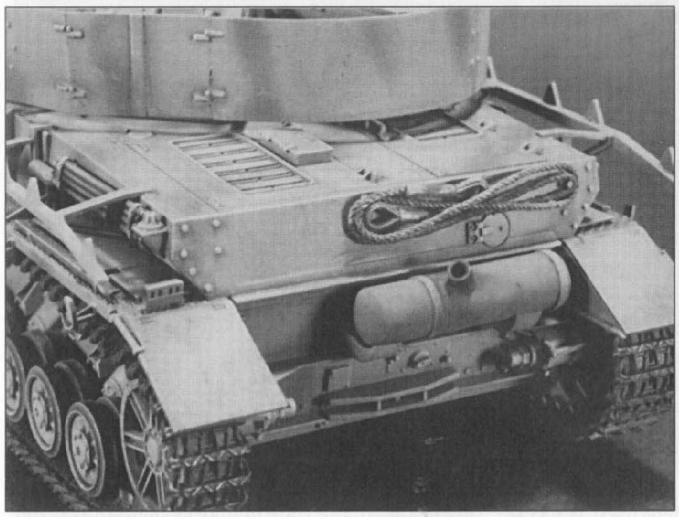
The kit's tools. This is going to be the new standard. Soon to be available as a kit by themselves.







Right and left side turret views. This shows the sharp, crisp molding to good effect. The side armor is beveled and does not look too bad. You may want to replace it with thinner plastic. My favorite part of the turret was the cupola. Tamiya really nailed it.



The back end of my Ham. Notice that little box on top of the engine deck. This was slightly different on the H model and a second part is provided in the kit. The tow cable is string and comes in the box.

from the back (just like the real tank), so there's no absolutely distinguishing feature on the turret sides as they come from the box. Dare I say cool?

Tamiya provides an excellent start for detailing the gun breech. All of the major components are here; the breech lever, ejection guard and catch basket. The basket is really nice, with a realistic canvas texture.

I took the time to carefully measure the turret against drawings in Walter J. Spielberger's *Panzer IV & Its Variants*. It came off less than half a scale inch different and it was spot on to measurements I had from the H model on display at Munster, Germany (it pays to have friends stationed abroad). I was highly impressed to say the least. I believe this is the first kit to get all of the dimensions correct.

The gun also scales out correctly, but the muzzle brake is surprisingly too small. I will say that it's closer to scale than the previous kit.

When you build the turret armor, install the brackets to the side armor first and not the other way around. The instructions don't seem to indicate any particular assembly sequence, but adding the brackets first will cause fit problems later. Glue the brackets on the back first, then add the side brackets and finally the doors. It'll take some fiddling to get it right.

Tamiya made a good effort to bevel the edges of the side armor, but you'll probably want to replace it with thinner plastic or brass stock. We'll probably see this appear on the after market scene pretty fast. One other little turret nick-pick: the bracket on the back of the turret stowage box that connects to the shurtzen, is missing.

Paint that Panzer

After construction was completed, I painted the model overall black. I do this do achieve depth in the final coat of dark yellow. Dark brown would also work as a base coat.

I used Floquil SP Armor Yellow, followed by a lighter overspray of Floquil Depot Buff. The buff color is excellent for German armor. Next, I sprayed Testor Medium Green in a loose pattern over the entire model. I weathered with a wash of dark brown, drybrushed with light tan and gray, then lightly dusted pastels around the running rear. The tracks were painted Floquil Antique Bronze.

I wanted a relatively plain scheme representing one the J's used in the Normandy battles. Many of these were seen with rather ho-hum paint jobs. Also many of these tanks had no zimmerit and I didn't want to cover up any of that nice surface detail.

I used decals from Tamiya's supplemental decal sheet on German armor for the numbers. If you renumber your kit, remember that in the west, Panzer IV's were mostly assigned to the 5th, 6th, 7th and 8th companies of the regiment.

The End

Overall this kit is the best Panzer IV on the market so far. The molding and accuracy are easily as good as the Panther and Tiger kits. I'm excited about the prospect of subsequent Panzer IV's and I hope that things like the side skirts and the hull sponsons are dealt with in a more effective manner in these kits (if they are featured). I felt it really pulled down an otherwise excellent model. These areas will be of special concern to modelers who are on a budget.

If you a are big German armor fan, you'll find it hard to resist (I did). Overall, I was pleased with the finished model. In spite of my gripes, I'm sure Tamiya will have another hit on their hands.

—Randall Johnson

MMiR RECCE

Tamiya Panzerkampwagen IV Ausf. J. Kit number 35181. Sample graciously provided by Tamiya of America. Suggested retail is $49.00.

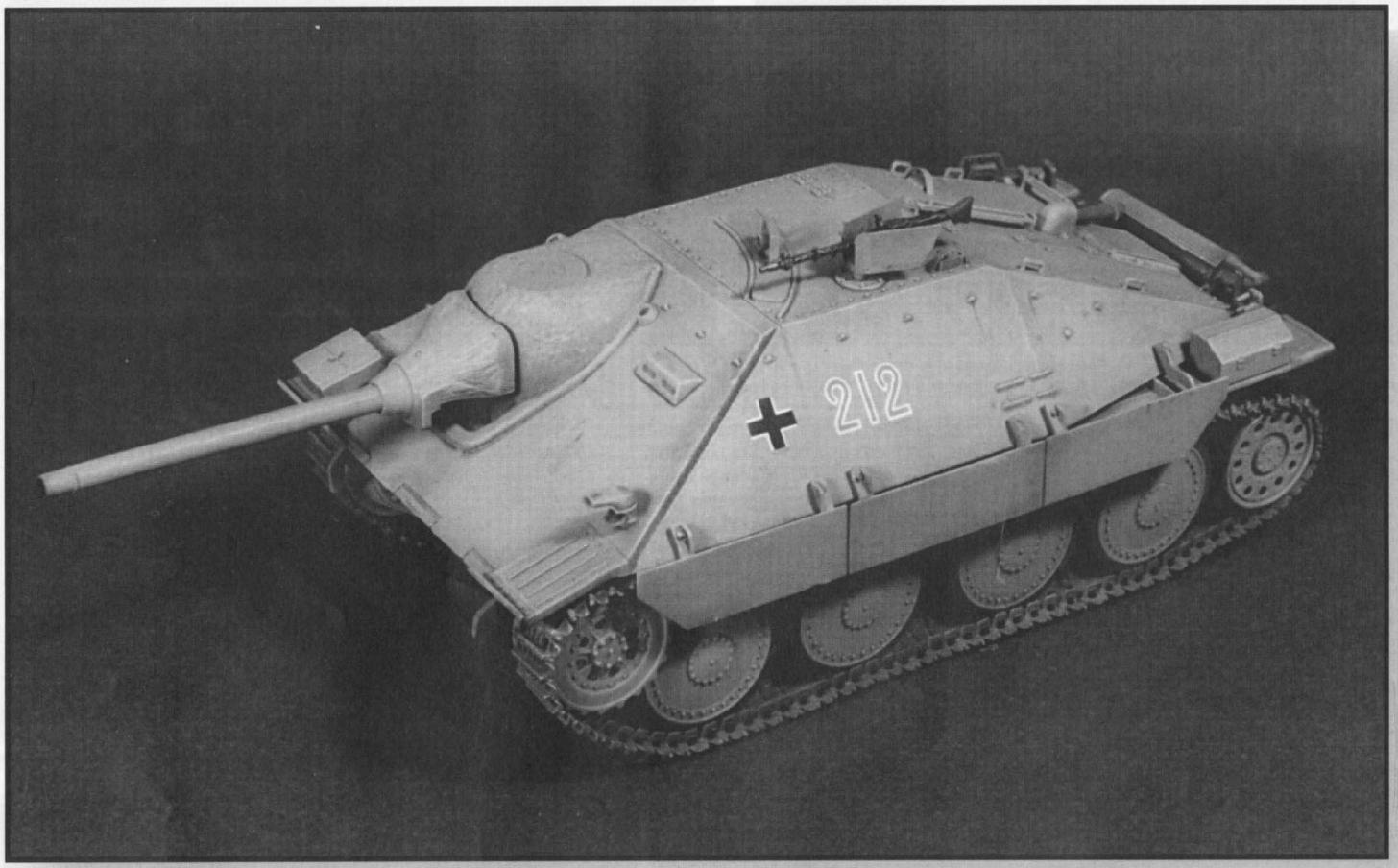
Of course, you can find photos of the Panzer IV in almost any book on German armor, I'm listing most of the more specialized stuff. If you're just looking for a cheap, general reference, there is a Panzer IV title in the Squadron *In Action* series for about ten dollars.

Panzer IV & Its Variants, by Walter J. Spielberger. Schiffer Publishing. Now available in English, this book covers the later tanks well. It's about thirty dollars at specialty book sellers such as RZM.

Achtung Panzer, No. 1. Dai Nippon Kaiga. This is the extensive modelers' reference published in Japan. Contains hundreds of sketches of even the smallest details. Excellent coverage of the H and J. Includes line drawings. This volume is also published as *Achtung Panzer No. 3.* This is basically the same book, but with more photos and better line drawings. Not cheap (about thirty-five bucks), but you'll be hard pressed to find a more complete source of information on the Panzer IV.

Sturm & Drang, No. 4. Panzer IV. Delta Publishing. Another one of those Japanese books—you can't read the captions, but you can't beat the photos. Chock full of photos of the Panzer IV from

PYGMY Panzer



Another new addition to DML's 39-45 series is the Jagdpanzer "Hetzer." This was the third in DML's surprise series from late '94. Why a Hetzer, you ask? What about the Italeri kit? Well, first all of the DML kit represents the very early version and secondly, it brings the kit up to current standards. The model is of the May-July manufacture type, with the cut back gun mount. It can also be distinguished by the configuration of the rear engine deck. The two small hatches located on the bottom corners of the engine compartment are not evident.

This is going to be a pretty short review. Primarily because it's a pretty short little model. There's almost nothing to it. The real tank was all tracks and wheels, with very little in the way of the bumps, bulges and protuberances that make up your average tank.

The kit is based around the great little suspension set that was originally offered in the DML Grille kit. This kit contains absolutely no parts from the Italeri kit. None of them would work anyway. The wheels and tracks are crisply molded and the wheels do contain the correct number of rims bolts for this version. The wheels lack any detail on the back, but I couldn't even begin to speculate what's back there.

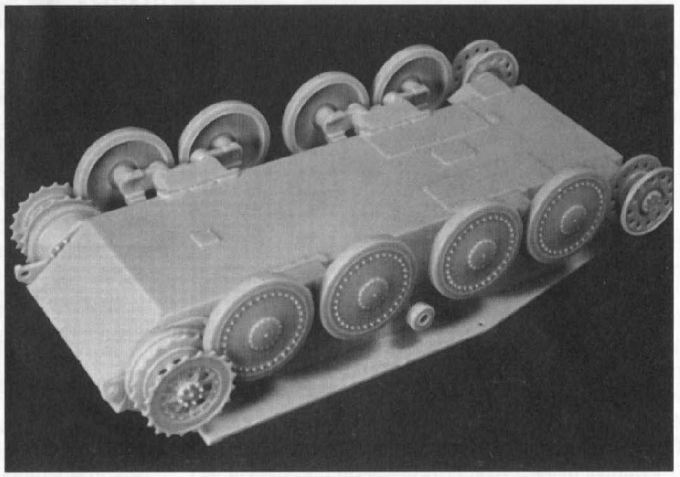
I started with the lower hull and suspension, and construction went along really fast. Watch out for the return roller mounts, there can be difficult to identify. The suspension system itself is nicely detailed, but alas, it's mostly covered up by the roadwheels. You'll know it's there.

Do not make the same humongous mistake that I did on the suspension. The idler wheel (which is another feature of an early Hetzer and correctly represented in the kit) is installed on a rotating "dog leg" mounting bar. This allows it to swing back and forth. The fit on mine was loose, so I used liquid glue to freeze it into place. However, I didn't pay attention to the drawings, which clearly show it moved forward until the last roadwheel actually passes through its two halves. This, as any meathead knows, is correct. In any event, I left mine too far back and this resulted in a poor fit of the tracks, i.e. I had to use almost every link to span the run. If you install the idler correctly, this won't be a problem.

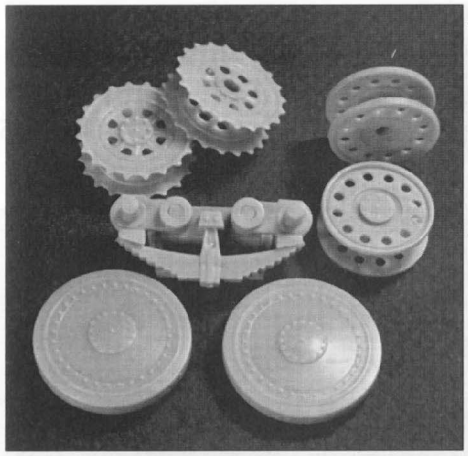
The tracks are perhaps the nicest part of the kit. The knockout points (inevitable on any kit) are placed dead center on the inside face of each link, between the two guide horns. This all but ensures they'll be more or less invisible when the tracks are installed. There are minute amounts of flash on some of the links, but it's not rampant. Be careful with the tracks—the links are somewhat brittle.

I made one giant run (using liquid glue) for each side, a steel ruler helped to keep it straight. When this had stiffened, I wrapped it around the suspension, with one link left unglued on the bottom. After drying overnight, I gently lifted them off for painting.

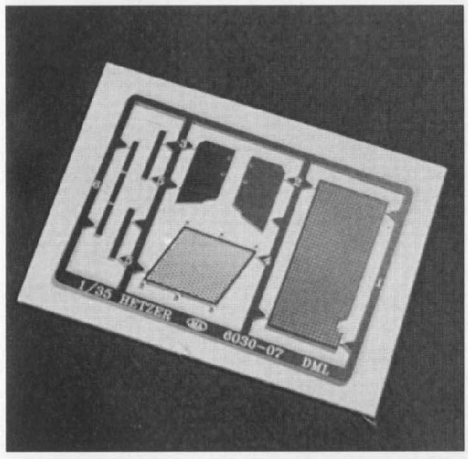
I noticed that on my example, the sprocket halves didn't quite line up. I just removed the locating pin and aligned them by eye. No big deal.



The bottom of the hull is fully detailed. Where you expecting anything else?



Above: all the suspension components laid out. Below: the very nifty set of photo-etch included.



The suspension will take the most time and once it's done, the rest is a cake walk. The upper hull and gun were a cinch and no fit problems were encountered. I was impressed by the very crisp and sharp detail of these parts. One annoying defect, was that each of the front fenders had two knock-out marks on their top side. This was annoying because the front fenders have an raised pattern in them, which means lots of works to fix. Oh well, if it's not one thing...

One very welcome addition in this kit (and a current trend with DML) is a sheet of photo-etched parts. The sheet includes the perforated muffler cover, the small engine vent screen, periscope guards and the armored cover for the remote MG. Everything fits fine and the screens and muffler cover really pretty up the engine deck. I flipped one of the periscope guards into the abyss that is my carpet. I made the replacement from the fret of an old photo-etched sheet. The MG shield is in two pieces and this somewhat tricky to assemble. The real thing is two pieces, but I have to whine about something.

From an accuracy point of view, there's hardly anything to mention. One thing I'm relatively sure about is that very early Hetzers had a perforated stowage box mounted on the fender, rather than the solid one provided in the kit. That's about all I found. The kit measures out dead-on to plans found in *Leichte Jagdpanzer*, by Walter J. Spielberger.

Most of the photos I could find of the early Hetzer, around the time of it's combat debut, showed it painted in a simple one-color scheme of dark yellow. I'm not sure why this was the case. Perhaps they were rushed into combat, or maybe the maintenance companies didn't have time to mess with them. I do know that later vehicles sported obnoxious hard-line camo schemes. The carefully feathered paint-jobs of the larger Panzers seem to have eluded the little Hetzer.

I sprayed mine overall Floquil Buff. This seems to match Panzer "Dunklegelb" well. I sprayed slightly lighter shades in the centers of the large panels to create some depth. I used the kit decals and weathered the model with a wash of dark brown and a drybrush with light yellow.

This is a terrific little kit. The molding detail, tracks and photo-etch really make it a winner. About the only drawback were those sink holes in the fenders. I'm taking credit for the idler mistake, although the instructions could have stated in big, black letters "DON'T DO IT THIS WAY."

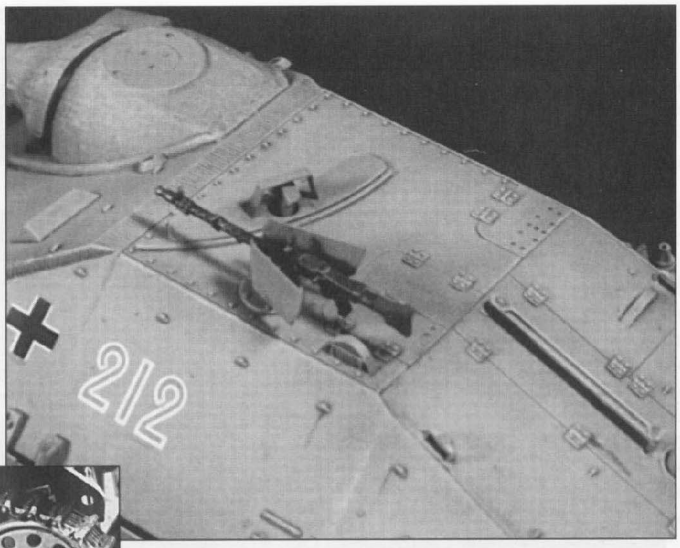
There's conversion potential in them thar hills. Hetzer units used a recovery version of the Hetzer almost exclusively. I believe this vehicle contained a winch inside and sported a spade. It also had a lifting jib like a Bergepanther. Hetzer Recce companies used the 140/1, which was the 38t with a open-topped 20mm turret grafted on to it. The 150 SiG was mounted on the Hetzer chassis, but this is one of those late-war rarities. Apparently, it did see limited combat. References on these three could be hard to come by, but when has that ever stopped you?

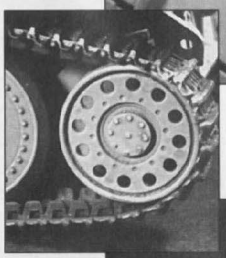
That interior is wiiiiiide open man—just waiting for some übermodeler to fill it up with prize-winning excellence (well, you know what I mean).

Don't forget the Flammpanzer Hetzer, but this was based on the mid-production version. As we go to press we're hearing about this has the next Hetzer release from DML. The kit's decals also have two stock numbers on them, so it seems like a sure thing.

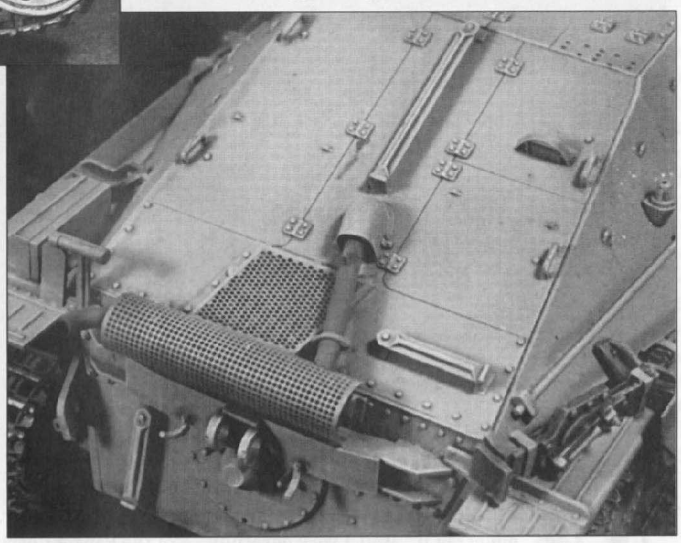
There's tremendous diorama potential too. It's small enough that a scene featuring two or three Hetzers would still be pint-sized.

—*Randall Johnson*





Above: the hull roof with the remote MG. The shield is a photo-etched item. Below: the back hull showing off more of those PE parts. Inset: my idler wheel foul-up. Kids: don't let this happen to you!



The back end sports an etched grill and muffler guard. Hubba-hubba.

MMiR RECCE

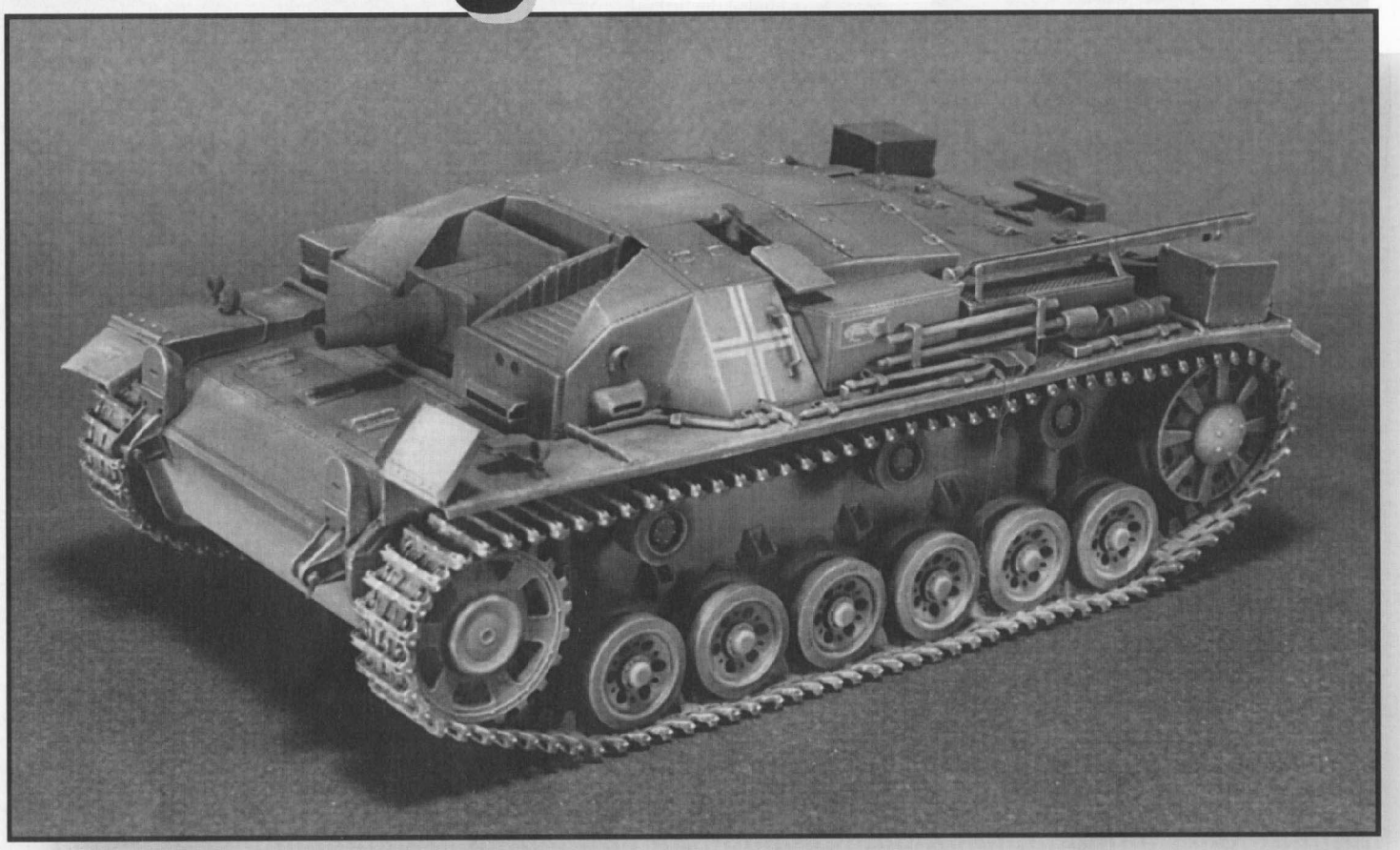
DML SdKfz. 138/2 "Hetzer," Early Version. Number 6030. Kit graciously provided by Dragon Models, Ltd. Suggested retail price is $26.98

WWII German Jagdpanzer "Hetzer," The Tank Magazine, 1983. 4, No. 8. This an old magazine-style book from Japan. The text is all in Japanese, but the photos and sketches are really great. It explores all the variants and even includes a good drawing of the interior. Admittedly, it will be scarce, but it's worth looking for. Check with someone in your local club or bookseller.

Leichte Jadgpanzer, by Walter J. Spielberger. This is the companion volume to Spielberger's Schwere Jadgpanzer and it covers its subject with all the thoroughness that we've come to expect from this highly detailed series. Currently, it's only available in German, but the photos and Hilary Doyle's excellent line drawings make it a must for the Hetzer devotee (that means you). One good source for this book is Articles of War, 8806 Bronx Ave., Skokie, IL 60077-1823. Phone: 708-674-7445, fax: 708-674-7449.

Sturmgebuildit

We get busy with the new Sturmgeschutz B and F models from DML



My mother used to tell me: "Be careful what you wish for, you just might get it." Well, I very carefully wished for a good 1/35th Sturmgeschutz. And guess what? I got two! Well, I'm not sure I can take credit for the release of these kits, but I am happy to see them.

This is going to be an odd sort of review. I'll be discussing the construction of the B model, but because the two kits are so similar, a sidebar will follow with more specific G2 on the F.

Although the B has been on DML's list for some time, it's only been recently released. The F followed pretty close on its heels, so it seemed only natural to do the two of them at once.

The first thing you'll notice about either kit is the number of parts. Each includes separate fenders and they mount on the kit just like the real tank. The tracks are link-to-link and there's lot of them. Both kits are relatively easy to built. Let's get started, shall we?

The Sturmgeschutz III B

If anybody out there is not familiar with the Sturmartillerie, let me give you an ever-so-brief synopsis. The Sturmartillerie was created as a support arm of the infantry and their express purpose was to provide direct fire support to the advancing foot soldiers and Panzer Grenadiers. The idea of basing them on tanks was to give them the speed and mobility to get right to the hotspots on the battlefield. The Sturmartillerie was considered an elite branch of service and they were neither part of the Panzer Corps nor the artillery branch. Crews wore a uniform similar to that worn by the Panzer troops, but in field gray with red piping instead of Panzer pink.

The Sturmartillerie's role changed as the war progressed, becoming increasingly anti-tank. By the war's end Sturmgeschutze vehicles made up a good part of the tank strength of many Panzer divisions.

DML's kit represents a late version B model. The Sturmgeschutz A was the first model and it used the 36cm track and a drive sprocket identical to that on the Panzer III E (with eight circular holes). As a matter of fact, the A was specifically based on the chassis of the Panzer III E. None of the early StuGs were considered Panzer III's. There were certain internal differences that distinguished them from their tank brethren and all but a few StuGs lacked the prominent side escape hatches of the Panzer III series. The B was an upgrade model in some respects, being fitted with the newer 40cm track and a drive sprocket that was designed especially for the new track. The B model was based on the chassis of the Panzer III H and therefore should have return rollers that are spaced differently (in other words: the kit is correct). Earlier chassis had even spacing of the rollers. They also had a slightly different style of shock absorber mounted above the first and last roadwheel. The only other external difference was the plates just forward of the main gun sight. Their arrangement was different on the B model.

It was not uncommon to see characteristics from both A and B models in the field. For instance, there was a spacer kit for the early sprocket that allowed its use with the wider track. The B retained many of the features of the A model, such as the sight aperture in the hull front, the unusual fluted idler wheel and the armored headlights. It was also not uncommon to see both return roller configurations thrown into the mix.

Sturmgebuildit

The kit reflects all of the late B attributes. I was particularly impressed with the level of detail throughout model. I started with the wheels and suspension and the first thing that caught my eye was that the wheels even have the small weld beads that attached the wheels rims. The rest of the suspension is all represented correctly, right down to the track tension adjuster units that the idler wheels are mounted to.

Make sure that you cut out only enough suspension arms for the slots in the hull. There's quite a few extras.

The next step covers the back of the hull and all the parts fit perfectly. The rear air intake (A7) slides in beautifully after you remove some good sized expansion lugs. Be careful when installing the rear tow points. Each side is different and they are a little difficult to identify.

The mufflers on my kit were marred with large

sink holes. On the real Sturmgeschutze, each muffler had an arrow embossed on its face to indicate the flow of the exhaust (a muffler is not much good installed backwards). So filling the holes means eradicating these arrows. I was fortunate enough to have parts left over from an old Gunze Sangyo Panzer III. This kit had an unfortunate encounter with Hurricane Andrew and about all that was left were the white metal parts. I added the muffler pieces as replacements with the kit's top pipes added to each muffler.

The tracks are the 40cm early type and are molded well. Even though they don't have open center horns, there's a depression in the horn that approximates it nicely. I found that the links would not dry fit together. What I did was to "lube" each link first with a drop of Testor liquid cement. This allows the links to slide together. I assembled the entire run at once and left only one link on the bottom unglued. Since the fenders were not installed at this point, it made it easy to lift the tracks off even when they were wrapped all the way around the suspension.

One thing they never tell you in the instructions is how many of the darn links to use. I used 93 links on each side, but my references state that over one hundred can also be used. There is a fudge factor involved, depending on the kind of sag you desire.

The upper hull is very well done. The kit even has the attachment flanges all around the hull. This is exactly like the real StuG or Panzer III. Far-out man! There are separate pieces for the front of the upper hull, the area above the transmission and the back of the upper hull. All of these fit near perfect.

The only thing I didn't like about the upper hull was that the interior is not empty. It's blocked off with a box-like structure. This is where the gun mount attaches. If you want to add an interior (not a bad idea given the way the hatches peel back), you'll have to cut this away. The gun from the Tamiya Stummel would be a great starting point for an interior.

The gun mount is very basic, but it's similar to the real mount. It and the base for the sighting periscope need to be installed before buttoning up the hull. The scissors-type periscope is supplied in the kit, are but there's no sign of its mount (it is in the F). I built my kit buttoned up, so I didn't use it.

I believe there should be four rectangular lugs on the face of the plate that the gun passes through. They're missing on the kit, but it is very difficult to see this when the gun is installed.

At the back end of the hull, the rear engine access doors are molded separately. This is a nifty feature because many photos show these doors opened for additional ventilation. I installed mine slightly ajar.

There are small braces on the engine hatches to accommodate the installation of the raised vents. Of course these are not on the B, so they should be carefully removed.

The side radio bustles are all add-on pieces and again the fit was terrific. If you are interior minded, you should trace the outline of each piece, then cut out the main hull. The air-intake housings are also separate parts. These parts and the antenna trough both get photo-etched items: screens for the intakes and support brackets for the trough. I didn't realize it until later in the construction sequence, but the brackets are also provided in plastic (A46, 47, 48). Use these as patterns when folding up the etched parts.

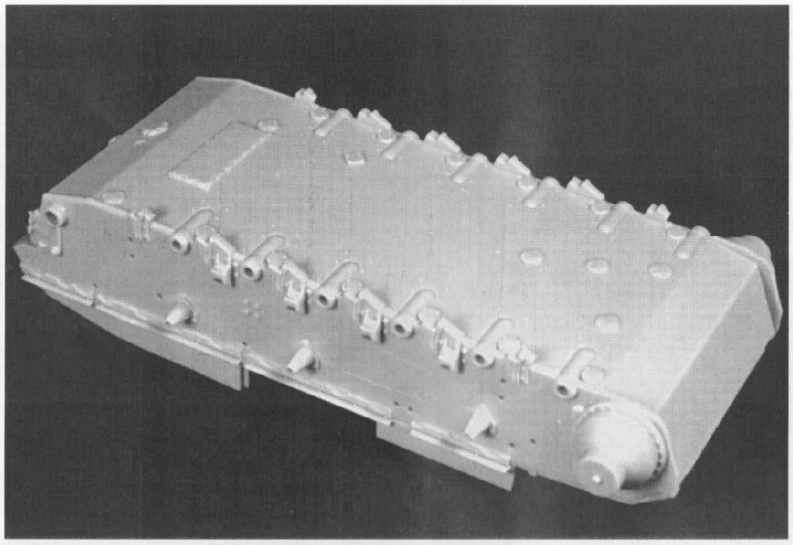
One other interesting feature of the hull was the outline of an escape hatch above the wheels. The instructions don't mention it, but it should be scraped away. This is the location of the escape hatch on the Panzer III. No side hatches are provided. I sure hope this means an upcoming Panzer III. All you'd need to make this kit into a Panzer III H, is a turret, half an upper hull and, of course, those elusive hatches.

As I mentioned at the top, the fenders are separate and this is the crowning feature of the kit. Real StuGs and Panzer III's all had these "hung" fenders. The kit does it just like the real thing. Four brackets mount on top of the fenders and these in turn mount to the hull. The whole thing is highly realistic. They even have the slight downward cant of the real tank. I'm all tingly.

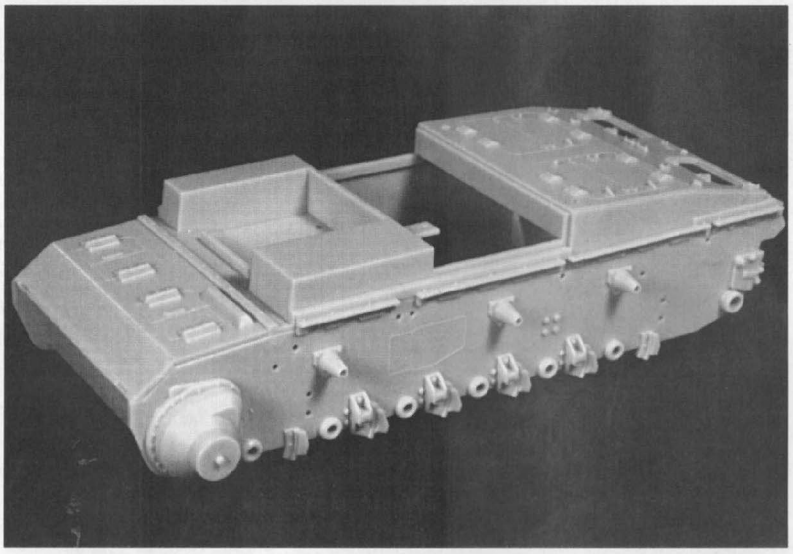
There's two minor, minor glitches. The front inside of the fenders are open, while they should be blocked off. I'm not quite sure how they look in this area, but I know they're blocked off (I swear it man!). I couldn't find a real good picture that showed any fine detail, but photos do show the area to be solid. I just blocked the area with plastic card. Secondly, I believe there are two additional supports just aft of the last support rod and one just forward of the very front rod. These do not have a hanger like the others, but support the fender from underneath. Again there's no specific picture to refer to, but the bases of these supports can be seen in a number of photos. The very last support base is where the real tank's rear fender makes contact with a V-shaped bumper.

The tools that mount on top of the fenders are all very well done. As a matter of fact, there some of the nicest I've seen and are definitely the best that DML has ever done. A marked improvement over all earlier efforts.

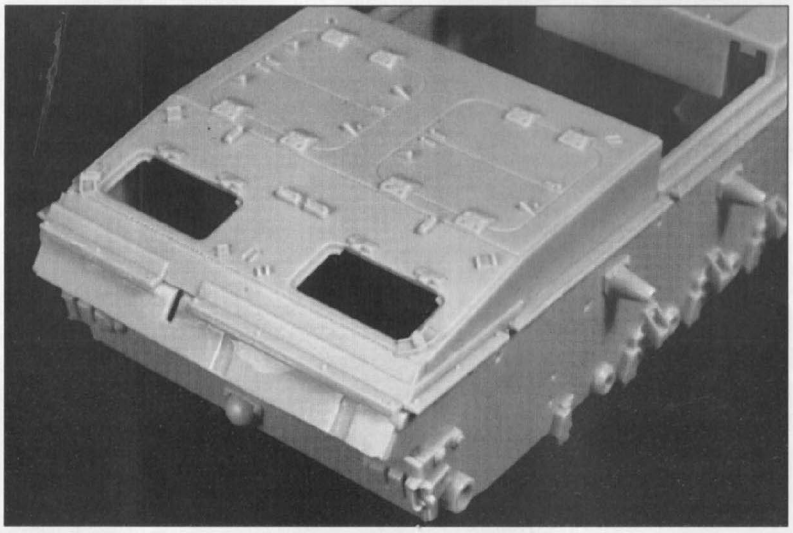
In order to show all this good stuff off, I wanted

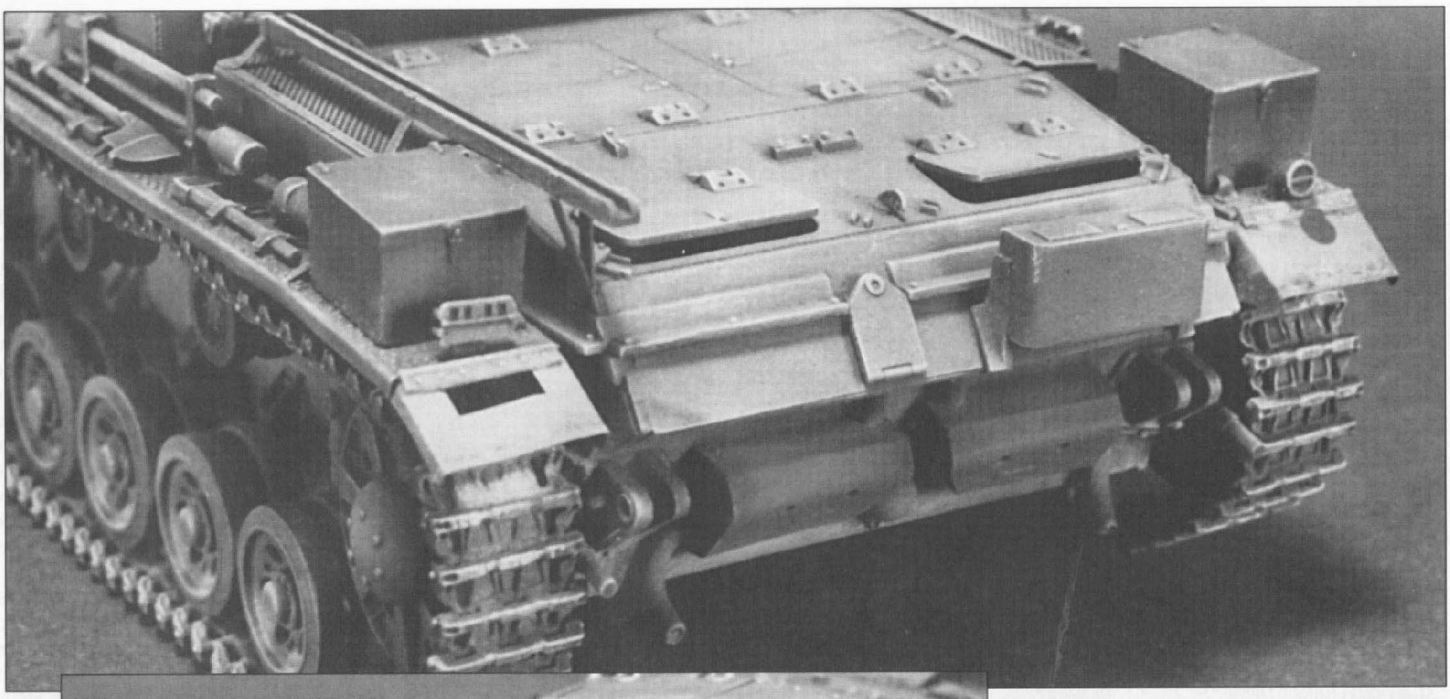


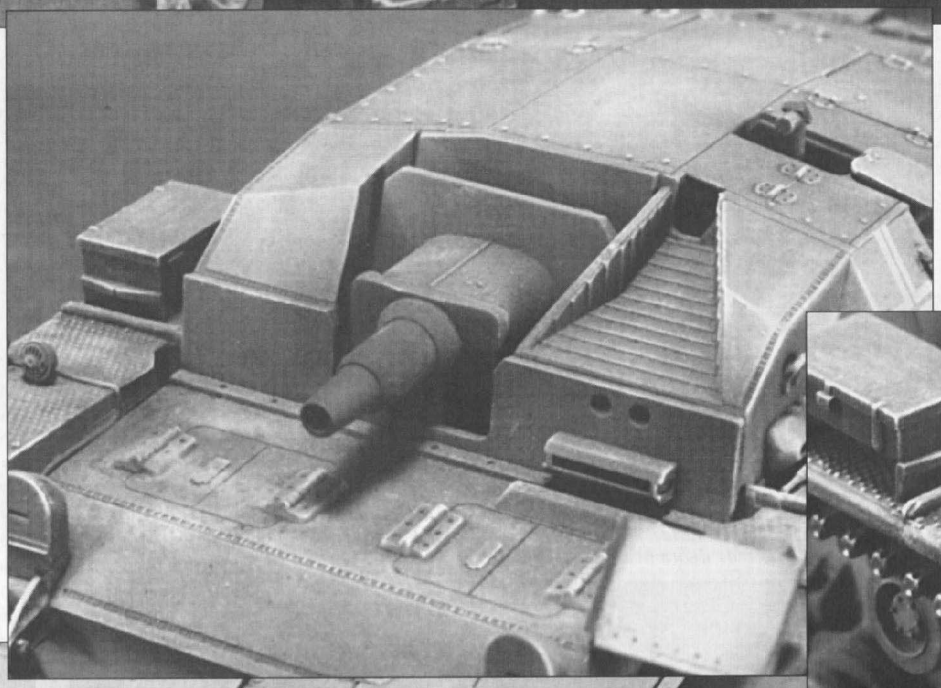
Above: the bottom of the hull. The basic hull configuration is the same for both the B and the F. Below: the upper hull showing the box-like structure inside.

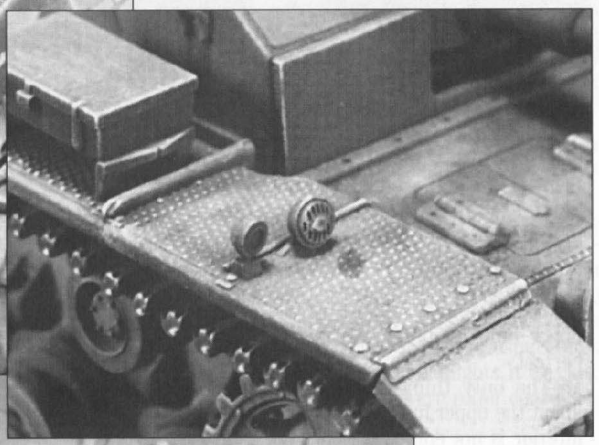


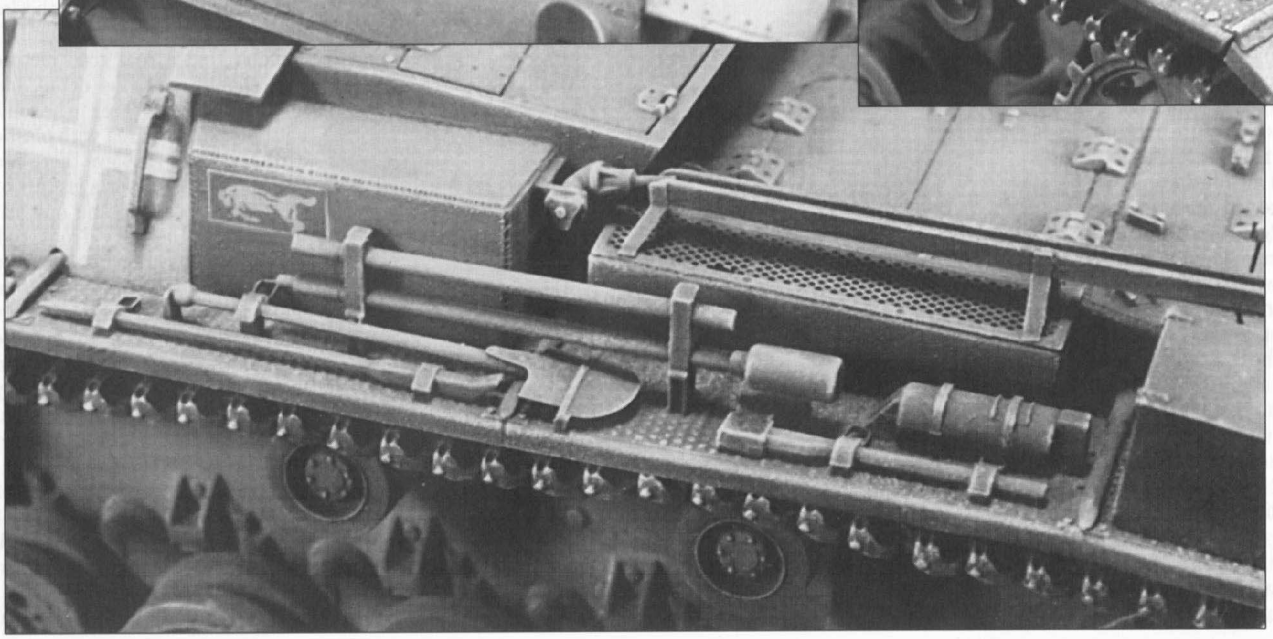
Also notice in the photo above, the outline of an escape hatch. This was a feature common to Panzer III's, not Sturmgeschutze. Mighty suspicious, if you ask me. Below: the rear engine deck. The rear doors are separate pieces.



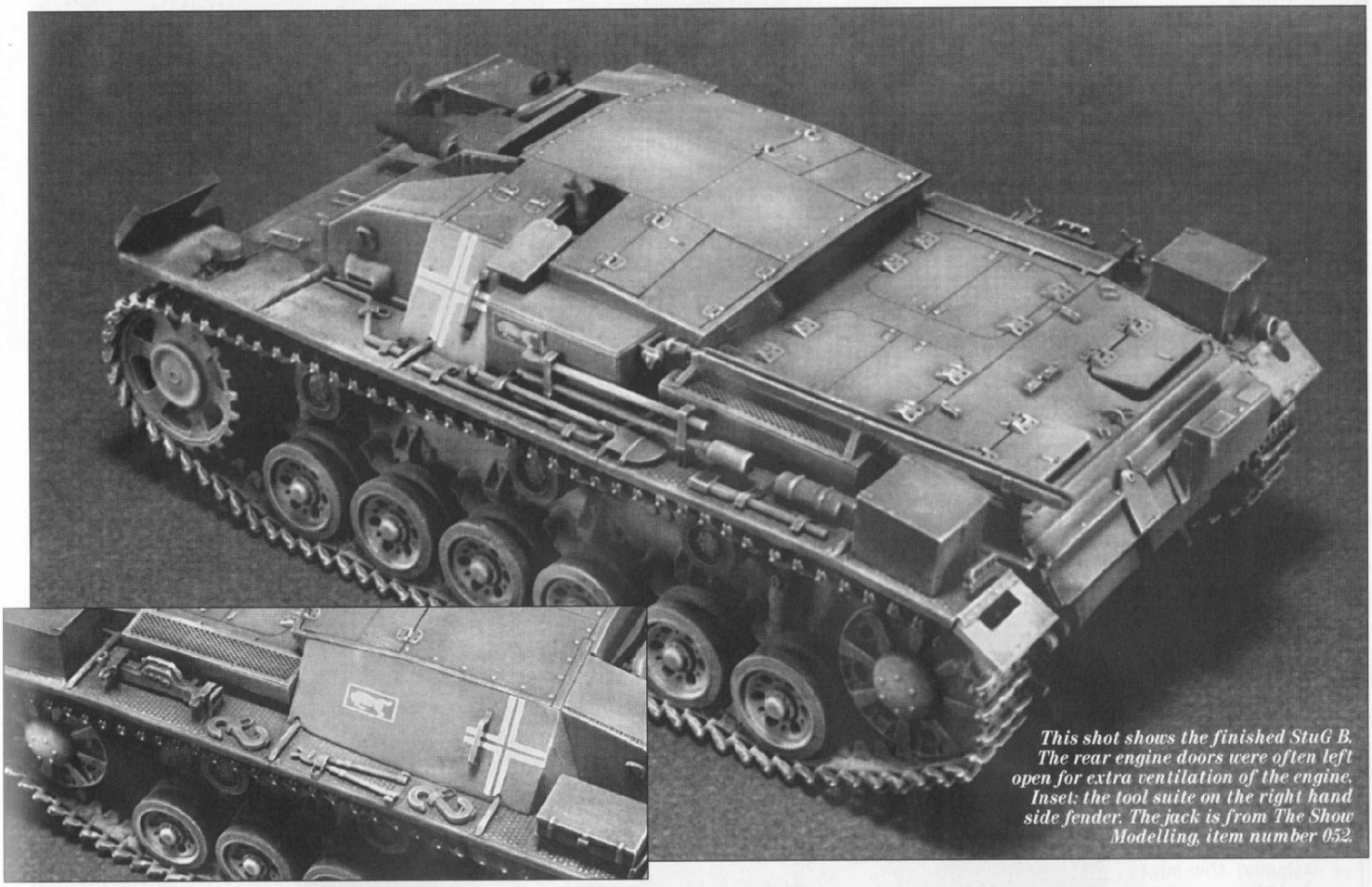








Above left: the rear end sporting those replacement mufflers from the Gunze kit. Left: the front of the main hull. The stepped aperture opening was one the the distinguishing features of both the B and the A models. Below: detail of the right front fender. You're gonna want to steal that siren for other projects! Bottom: the tool suite on the left side of the StuG. Note the tool clasps and the shovel head. Both are from the add-on sets mentioned in the text. The kit's tools look pretty good too.



This shot shows the finished StuG B. The rear engine doors were often left open for extra ventilation of the engine. Inset: the tool suite on the right hand side fender. The jack is from The Show Modelling, item number 052.

to jazz up these areas of the model. I also wanted to illustrate that there are products out there right now that you can use on your model. No waiting required. I used products from two manufacturers: MB Models and The Show Modeling. MB made a set for its Panzer III's that was also available as a stand-alone item. This set includes the mud flaps, which is pretty much all I used from it. The Show Modeling makes several sets with useful parts. I used parts from a total of four available sets: Hooks, 031; Stoppers (tool clasps) 030; Panzer IV Vol. 1, 017 and Panzer III/IV Jack 052.

The "stoppers" were the tool clasps seen on all vehicle mounted tools. I simply wrapped them around the molded-on bands of the different tools. The tools were molded very crisply and the clasps dress them up just right.

From the Panzer IV set, I took the shovel head and its holder. German shovels from this period were simple, stamped metal. They were quite sturdy but bore no resemblance to the hardware store variety.

The jack is a cast brass item and its prominence on the fender dictated a more detailed item than the kit's. I used brackets from the Panzer IV kit to finish it off.

The hooks are those seen on all StuGs and Panzer III's. They were used for lifting the rear upper hull off the lower. The hooks come in two parts, the base and the hook itself. I used three and placed them over the kit hooks mounting points.

The final brass items added were the mud flaps. The MB flaps are an almost dead-on fit. They're just a smidge wider, so I bent them over slightly longer on the inside edge. It was necessary to remove the kit's flap while leaving the hinge area intact. This is a little tricky. I went at it with a very sharp knife, a good file and a dash of patience. The results are worth it as the hinge is molded quite well. This detail along with the bent up flaps make for a nice effect.

Sturmgepaintin

I painted my StuG overall dark gray. I favor a very dark shade. I know this is controversial, but I believe that Panzer Gray is much darker than depicted in most reference books. I start with the darker shade and fade the color out with lighter oversprays of gray and a lot of light tan (for dust and dirt) around the running gear and tracks. Before the final overspray of light tan, I hand painted all the tools and tracks and added the decals.

I used the kit's decals to depict a vehicle from StuG Abt191 during the Balkens campaign. I opted for the front mud flap to be flipped over, so I skipped the tactical markings there.

After the final coatings were dry, I washed over the entire vehicle with a thinned mixture of burnt sienna and black oil paint. I thin it with Testor Model Master Airbrush Thinner. Afterwards I dry-brushed with light gray and tan. The tracks were drybrushed with Humbrol Silver.

As a final touch, I used liberal amounts of gray pastels to give the model the very dusty look that early panzers had.

Enough Already

I had a lot of fun building my StuG B. I have a future project planned already to convert the B back into an A, using Fruilmodellissimo tracks and drive sprockets. I will also add an interior to this model (no really, I will).

This is a good, sound kit and I hope both StuGs will be the start of a whole line of Panzer III vehicles. I enthusiastically recommend you build this kit. I'm happy to see DML progressing to better and better kits. It's a great time to build armor!

—Ken Dugan

MMiR RECCE

DML SdKfz. 142, StuG II Ausf. B. Kit number 6008. Suggested retail: $29.98.

Sturmgeschutze III (L/24 & L33), the Short Barreled Versions, Schiffer Publishing. Soft cover, in the 11 x 8 1/2 format, this is a good inexpensive reference. It's only drawback is it leaves you wanting more. About nine dollars.

Sturmgeschutz and Its Variants, by Walter J. Spielberger. Schiffer Publishing (English Version). Really one of the best. This particular volume is probably the best in the series. It's extremely thorough in its discussion of the many variants. Excellent line drawings. Not cheap, around forty dollars. Schiffer Publishing, Ltd., 77 Lower Valley Road, Atglen, PA 19310.

Sturm & Drang, No. 2 StuG. Delta Publishing. The second in the series of Tank Magazine specials. Excellent photographic coverage of vehicles in the field. Also pricey (but worth it), about thirty bucks.

The Sturmgeschutz Ausf. F

The F kit is the second release in the Sturmgeschutz line. This was one of DML's surprise items from last November. I was actually expecting the C/D model as this has been listed in DML catalog for some time. It actually had a lower stock number (6009) than either of the B or the F. What they don't tell you in the instructions is that all the parts for a C/D, E and an F are in this box. In addition to the long barreled seventy-five, the short version is still included. The C/D, and E used this gun in addition to the spoked idler. It remains to be seen if this will be released as a separate C/D kit, but it's nice we don't have to wait.

The construction of the F is almost identical to that of the B. All of the roadwheel, suspension and track work is the same. The track tensioning assembly is slightly different, but not much.

Another deviation from the B is the installation of a photo-etched exhaust deflector. This part is nicely rendered, but mine didn't quite fit. I trimmed the edges slightly to get it to slide in correctly.

The mufflers, which were plagued with deep sink holes on the B, were spotless on the F. As a matter of fact, many of the small molding imperfections seen on my B, were not seen on my F.

The upper hull is redesigned with the modified sight aperture and the provision for mounting the long barreled 75mm gun. The kit includes a choice of two types of plates for the gun's periscope. Follow the instructions carefully at this point to avoid creating the C/D version. The underside of the hull roof is embossed with the outline of the C/D's distinctive cut-out as well.

There are a couple of minor mods that need to be made on the top of the upper hull to accommodate the raised vent housing and its fan outlet. It's just a matter of trimming off some bolts and poking through the mounting holes for the new structure.

It's a similar situation on the engine deck, where holes for the raised engine vent housings need to be popped through too.

The instructions do refer to the installation of the commander's scissors periscope and its mounting jig. I added mine and left the left side hatch open.

Some minor surgery is required to update the fenders. New front sections are provided and the existing fenders are scored at the point they are to be cut. A tab and receiving square make it all pretty painless. There's also a new panel for the top of the transmission area, representing the later simplified transmission hatches.

The fender mod is to accommodate the placement of the second section support rod. It's a few millimeters forward due to the armored side bustles.

An extra set of photo-etched brackets is included in the kit for the right-side antenna trough. This is one of the distinguishing features of the both the E and the F.

As I mentioned at the top, there are extra bits for the C/D and the E. I'm not trying to rain on DML's parade, but if you want the C/D now perhaps you should consider picking up an extra kit.

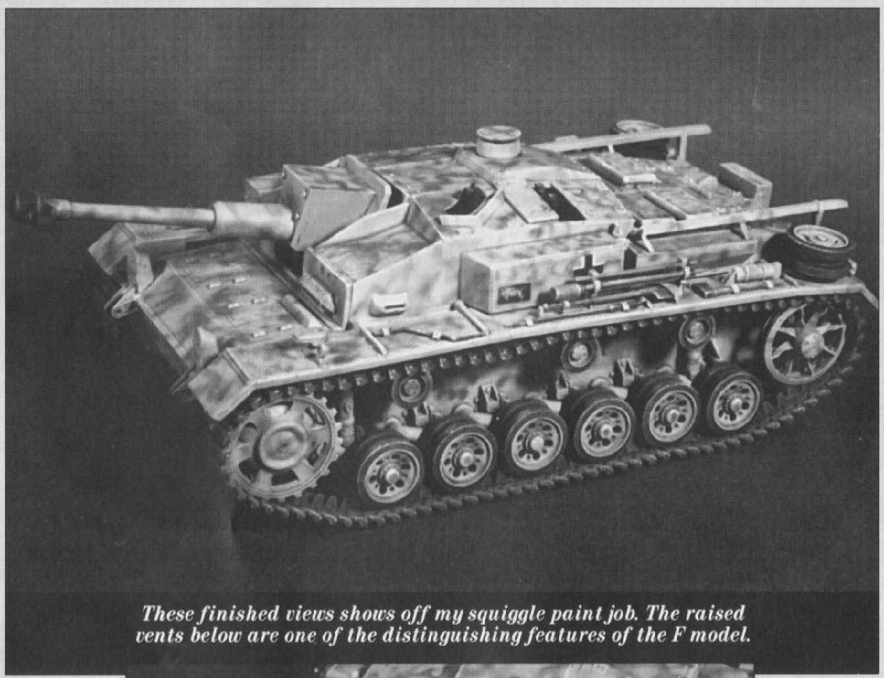
If you are keen to do the C/D, here's what you do: leave off the vent housing on the hull top and install the short barreled gun instead. Add the earlier side knock outs (C16, 17 and 18) instead of the larger, armored ones (E15 and 16). Add the other top left hull aperture plate provided (C25) and carve the aperture opening to match the scribe lines underneath. Use the earlier transmission cover (C15) with the large lugged doors and leave off the large vent covers on the engine deck. Also install the earlier, small blank hatches (C11) in the openings at the back of the engine deck and the photo-etched exhaust deflector below. Do not make the fender modifications.

To get the E model StuG, do all the same things as the C/D except add the F's transmission plate and the side armored boxes. Do make the fender modifications as described in the instructions.

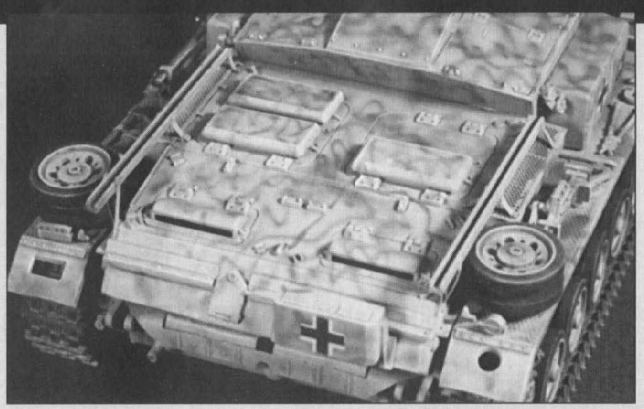
I had a great time building my F. Both the B and the F are great kits (in my humble opinion). I'm looking forward to more variants in the line. A G maybe?

I referred to the same publications for research on the F as on the B. One additional book was helpful. This is *Encyclopedia of German Tanks of World War Two*, by Peter Chamberlain and Hilary Doyle (Arms and Armor Press). It's coverage of individual vehicles is brief, but it gives great short descriptions of all German vehicles. The StuGs are all illustrated within a few pages, so you can flip back and forth to find the one you like best.

Check with your favorite bookseller or contact the U.S. Publisher: Sterling Publishing Co., Inc. 387 Park Avenue South, New York, NY 10016-8810. They represent a number of interesting titles regarding armor.



These finished views shows off my squiggle paint job. The raised vents below are one of the distinguishing features of the F model.



Stug III Ausf. F, SdKfz. 142/1.
Kit number 6033. Sample graciously provided by Dragon Models, Ltd.
Suggested retail: $29.98.

Mini Men

DML

Delta Force (Somalia 1993)
Kit number 3022

THE NEW DELTA FORCE set from DML is another in their series of special response teams. DML has mainly concentrated on the civilian sets, with one or two of the military teams mixed in.

When you mention the Delta Force to active service Army personnel, you get this response: Delta who? The Delta Force is the army's elite anti-terrorist team and it does not "officially" exist due to stringent security protocols.

The Delta Force was set in motion in the late seventies in order to create a team similar to some of NATO's other successful response teams such as the British S.A.S. Their name is derived from the unit's original designation: 1st Special Forces Operations Detachment Delta (SFOD D).

The set represents a four-man team all outfitted with the latest gear now in service. The four are rendered in action poses, three at the ready and on the move, while the fourth is kneeling.

All wear (at least on the box) the new three-tone desert camys that began to see service after the Gulf War. They sport a variety of equipment items, many of them also common to civilian response teams.

The three standing figures wear Eagle LBV (Load Bearing Vest) assault vests, which is a common SWAT item. The Eagle vest allows for a variety of add-on equipment pieces such as magazine pouches and other items the wearer may desire. The kneeling figure wears a slightly different assault vest called a Tac-III.

If you look closely you'll notice that they all wear the Ranger-type body armor under their assault vests. This is more apparent on the box art than the figures themselves.

Two of the Deltas wear Pro-Tec helmets. This started out as a civilian kayak helmet, but was adopted by Navy Seal teams and then Delta Force members. It protects the noggin from blunt trauma but offers no ballistic protection.

Three are depicted with Hatch padded fingerless tactical gloves. The sniper figure is bare-handed which is accurate as he'd want to keep his trigger hand "itchy." These gloves are a another well-known civy response team item.

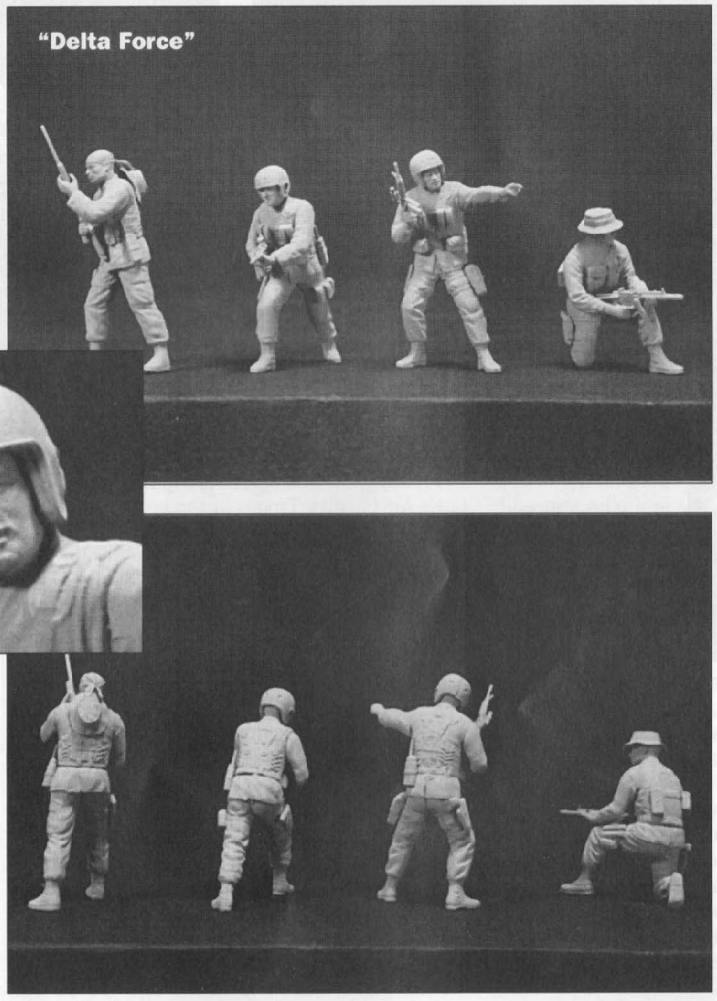
The two helmeted figures are toting the XM-77E2, universally known as the CAR-15, with "red-dot" scopes installed. The kneeling figure is armed with a MP-5SD.

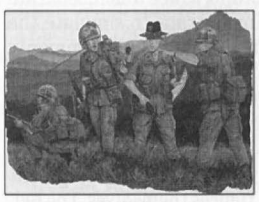
All the figures carry a sidearm. Although it's difficult to tell, it's probably the Australian Glock pistol—a popular choice among special forces team members.

The sniper is armed with the M40A1 "weapons system" composed of the potent Remington Model 700 sniper rifle and a Unertl high-powered scope.

The figures are all nicely done and DML really, really did their homework on this one. Diorama possibilities abound. We were unable to uncover any information on the Delta Force's specific mission in Somalia. If anybody out there can tell us without losing a security clearance, drop us a line.

For reference, check out the French magazine RAIDS which showcases the world's elite forces. This is available through RZM Imports (see ad elsewhere in this mag).





U.S. 1st Cavalry
Kit number 3312

This one hits the grunts of the famous "Cav" division in Vietnam. Poses are for an Air Cavalry Captain, a PFC radio operator, a rifleman, and a squatting M-79 grenadier. The Captain is equipped with the CAR-15 and is wearing a black Stetson Cav hat. He is named Mills on the box art, a clear reference to the Scout Pilot featured in the book "Low Level Hell" and pilot of one of the helicopters modeled in the DML Loach kit.

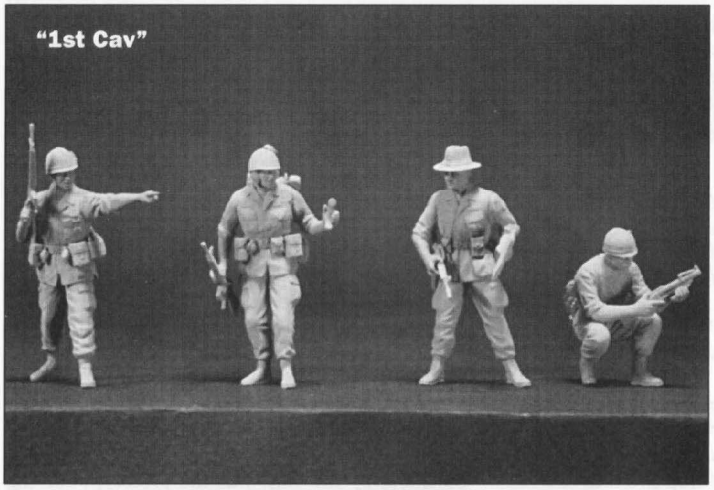
This figure is a bit of a mixture. The black Cav hat for Army aviators was first used at Ft. Benning in 1963 when the commander of D/3/17 Cavalry started the trend with a brown Stetson dyed Black by his troops and presented to him. He was Lt. Colonel John B. Stockton and he took D/3/17 to Vietnam under it's new designation, 1st Squadron/9th Cavalry Regiment, or 1/9. First of the Ninth Cav was the recon squadron for the 1st Cavalry Division. Pilots were encouraged to have Cav hats for ceremonial purposes, some enlisted men also bought them when they could afford to. Stockton, by the way, was the prototype for the Robert Duvall character in Apocalypse Now (without his permission).

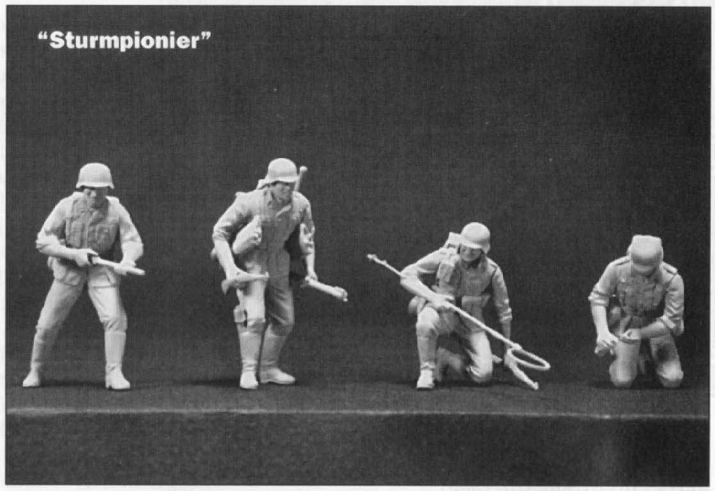
The hat becomes more common in Cav units toward the end of the war. In Vietnam the hat was worn mostly around base camps. An officer would risk damaging it taking it in a helicopter, so it is rare to see one in the field. Not impossible though.

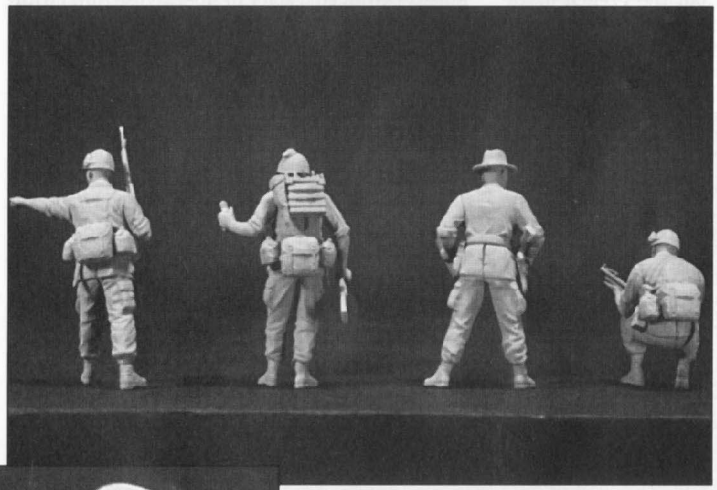
Volstad may have mixed Captain Hugh Mills into this set to connect the figures to the DML OH-6A kit which featured markings for his personal aircraft. The only problem is the MISS CLAWD IV named helicopter was attached to one of the independent Air Cav Troops, in this case, to H Troop, 16th Cavalry Squadron. They were derived from D Troop 1/4th Cav (Quarter Cav) which flew in support of 1st Infantry Division. Hence, the Big Red One patch on the figure's right shoulder. Putting the big 1st Cav Div. patch (called a blanket by some) on the left shoulder is not correct, since Mills was never in 1st Cav.

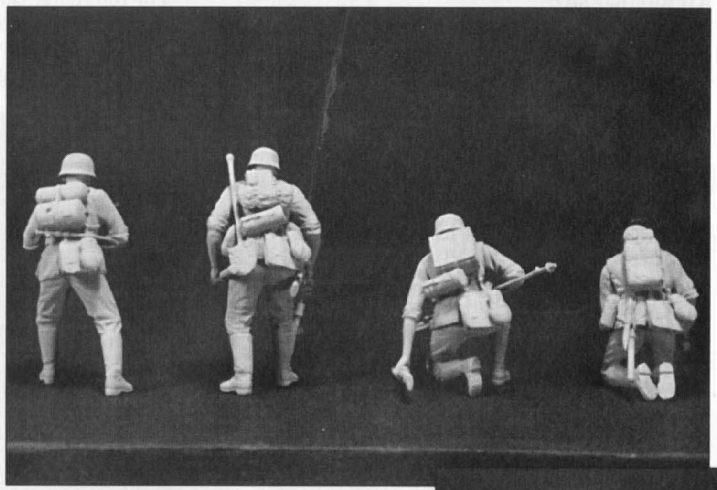
There were plenty of Cav officers who could have served in 1st Infantry Division on their first Vietnam tour, and then with 1st Cavalry Division on the second tour, so just change the name to something other than Mills.

The wing-shaped subdued patch above the left breast pocket is the standard officer's Aviator Wings. It is a shield emblem with wings coming off the sides of the shield. Photos of Vietnam pilots should show the same thing on their chests if you need to see one. As for the equipment fit, the items chosen are valid, but not the common rig for a pilot. Pilots rarely used .45 cal pistols, they were issued the .38 cal pistol (M10) and most had shoulder









holsters for them. The .45 cal was uncomfortable worn around the waist in a pilot seat and too heavy for a shoulder holster. The CAR-15 was a common personal weapon but not normally issued to pilots. Most came by them creatively, using trades to obtain them. Mills did have a CAR-15 (he was unit CO and all the weapons in the unit were signed out to him) and it was preferred by pilots of scout helicopters because of the short barrel.

Few pilots would have worn jungle boots if flying. Most bought Cocoran Jump Boots because they spit-shined better and looked classier. Leather boots were mandated for all aviators for fire reasons, but most enlisted men did not have them because the Army didn't issue them in Vietnam. Officers brought their stateside boots with them or bought new ones in the PX. Most pilots had flight suits (it was a two-piece type back then) and many wore them all the time, even when not flying. Captain's had staff duties, so they often were seen in Jungle Fatigues.

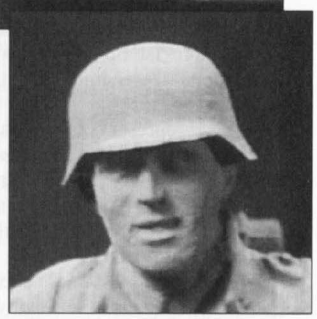
You can now see the first Vietnam vintage Cav hat at the museum at Ft. Benning. Colonel Stockton recently donated it. It had been hanging in his house for many years and was beginning to turn back to brown. DML should be applauded for giving us a hat to work with. Finding a suitable use for it should be no problem.

The grunt poses all represent lightly equipped troops, which in the 1st Cav tended to be from the Blues in the Cav's recon squadron, 1/9 Cav. So what you really get is a command group from one the 1/9 Cav's Air Cavalry Troops in the latter part of the war. Neat.

The RTO operator is posed handing the telephone to his superior. He has two canteens, the multi-part PRC-25 radio set, a butt pack, antenna case, smoke grenades, ammo pouches, and includes separate headset earphones to stuff under his helmet. The standing rifleman is pointing with an arm that has a watch in the artwork but is not on the molded part. He carries ammo pouches, canteens, and butt pack, and is armed with the M-16A1. The squatting grenadier is shown on the artwork as a black soldier and his facial features are consistent with that and most welcome. He is equipped similar to the rifleman, but has an ammo sling for the M-79 grenades. Not enough ammo for more than a short fire fight in our opinion, but not unrealistically so.

Weapons are included on a separate sprue tree and are the same ones given in many of DML's Vietnam Series kits. This means you get extra ammo belts and an unused M-60 machine gun in addition to the needed rifles for the poses. The main sprue also has extra M-26 frags and, a nice touch, separate parts to add to the helmet straps to simulate the small bottles of bug juice and gun oil commonly placed there.

We would like to ask DML's sculptors to make the butt packs different once in a while. No two GI's ever got them to pack the same, so it's too bad there's not as much variety in the equipment shapes as there is in the figures themselves. The helmets, we thought, were also a touch on the small side—not enough "hangover." This was always a problem with the Tamiya sets of the seventies. Two minor nits. All in all a good kit.



For reference see Men-at-Arms #104, *Armies of the Vietnam War 1962-75* by Philip Katcher.

German Sturmpionier (Kursk 1943)
Kit number 6024

SET 6024 DEPICTS A group of German Engineers at the time of Kursk. The mission of these groups was to clear large obstacles and fortified positions for the advancing infantry. They employed a variety of specialized equipment that included various explosives, flame throwers and good old shovels.

Each of the four wears the later-style uniform without the pleated tunic pockets. They still retain the jackboots rather that the short boot and gaiter that was beginning to see service at this time.

As in previous sets they are all posed in motion. They look like they're just getting ready to move out.

Two of the figures are standing, while two

crouch on the ground. The first of the standing figures is at the ready carrying his Kar 98 in his right hand and an assembled Bangladore torpedo in his left. This was called the *Rohrladung Stahl* by the Germans and it consisted of two steel tubes filled with 3kg of TNT. One end contained a detonator and the other a wooden plug. Around his neck is a set of bandoleer bags for the German "potato masher" type grenade. A cautious fellow, he carries an extra grenade tucked in his right boot. In addition to all his regular infantry gear, he wears the long pioneer spade and its holder slung over his left shoulder.

The second standing figure is armed with a flame-thrower unit, known as the *Flammenwerfer mit Strahlrohrpatrone 41*. This was the second version of this weapon, improved with a more efficient ignition system. DML's rendering of it is quite accurate. Surprisingly, it was common to see this weapon used by individuals without protective clothing. The figure is even shown with his sleeves rolled up. Photographic evidence does support this. A special flame-resistant suit was available as were heavy denim fatigues.

The two crouching figures both sport highly specialized engineer equipment. The kneeling figure wears the complete *Pioniersturmgepäck* ensemble. This was only doled out to one out of five pioneers in divisional pioneer battalions, so it makes sense that he's the only one wearing it (we'll just have to imagine that fifth guy!). The ensemble was a three-part affair consisting of a large rear pack and two smaller packs all coupled together with leather webbing. All the packs were designed to carry several different types of explosives and grenades along with some of the soldier's personal kit. He's posed in the process of arming a 1kg explosive charge called a *Geballte Ladung*. Three of these were carried in the smaller left hand pouch.

The final crouching figure is posed lifting himself off the ground. He's armed with a Kar 98 rifle and is employing an *Aachen* mine detection device. This was basically a long metal pole, with a metal loop on the end. Electric current ran from a battery pack to the loop, generating a mild magnetic field. Metal-cased mines would disturb this field, the operator being alerted through a set of headphones.

This is another super set by DML. As hard as we looked (and we looked pretty hard), we found no accuracy or molding errors. As always, the price is low enough to justify the purchase of more than one set. Stripped of their pioneer gear they'd all make up a great infantry group.

For references check out Ron Volstad's terrific illustrations in Men-at-Arms #234, *German Combat Equipment 1939-45* by Gordon Rottman.

Tiger Aces (Normandy 1944)
Kit number 6028

THIS SET DEPICTS THE crew of the famous "Tiger Ace," Michael Wittmann. You get five figures in the box, instead of the usual four. We assume that each of the figures is meant to represent a specific member of the crew, although the back of the box does not state who's who. It is possible to determine some of their identities. Here's our best guess. The easiest is Wittmann himself. He's shown wearing a Kreigsmarine leather jacket (courtesy of the Italian navy), and the normal tanker's denim trousers. He's shown topped off with a Einheitsfeldmütze cap, but most photos from the Normandy time frame show him wearing the officer's peaked Schirmmütz cap.

The figure strikes a casual pose—he holds his earphones in one hand and appears to be in the process of taking a drag on a smoke. That hand in our example was badly marred from a molding flaw, which was too bad.

The second in the line-up is the gunner figure. He bears a striking resemblance to Oberscharführer Balthasar "Bobby" Woll, Wittmann's gunner during the summer of 1944. As a matter of fact, he's a dead ringer. Good show.

The remaining crewmen appear to be inspired by photos taken at the time of Wittmann's receipt of the Oaks Leaves to his Knight's Cross. This was on January 30, 1944 and photographers from the German propaganda magazine *Signal* were on hand to record the event. At this time all but Wittmann wore brand spanking new panzer uniforms in the SS summer camouflage pattern. In these photos Wittmann is pictured in his standard black panzer uniform rather than the leather/denim combo shown in the set.

Each of the figures in posed specifically on some portion of the Tiger I tank. The Woll figure takes the loader's hatch, while another sits half in and out of the radio operator's hatch with his arm draped over the mantlet. A third is perched on the turret with his foot resting on the main gun.

This set would make a terrific vignette, and its use is not limited to just representing Wittmann's crew. Any of the figures would look great hangin' out on your Tiger I, or with little twist and bendy, your Panther or Tiger II.

It's a bit of a bonus too, because you get five for the price of four. Highly recommended.

Here's an interesting historical factoid regarding Wittmann's death: Although the exact nature of his final engagement is still debated (some say five Shermans ganged up on his one Tiger, others say it was a British Typhoon), until 1983 it was believed that they were buried in one of the large French war cemeteries. Unit diaries reported that Wittmann and his crew had been temporally interred in battlefield graves at the side of the N158 roadway near were their mount was destroyed. It was naturally assumed that they had been relocated after the war. In the course of researching the After the Battle book: *Panzers in Normandy, Then and Now*, the French author Jean Paul Pallud found that the names of Wittmann and his crew had never been recorded with the German war graves commission. Though further investigation, by Mr. Pallud and by German authorities, the crew's remains were found to be still next to the N158!

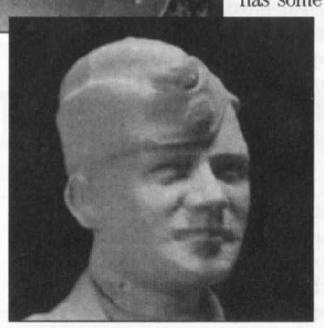
Of the five, only three could be positively identified; Micheal Wittmann, Rudolf Hirschel and Heinrich Reimers. Several artifacts were also uncovered, including a 6.35mm pistol. This small caliber weapon was favored as a sidearm of ranking officers and may have belonged to Wittmann himself.

Wittmann's loader, Balthasar Woll, was not serving under him at the time and therefore escaped the fate of his comrades. He survived the war and lived out his days in Germany.

For reference we recommend the excellent *Panzers in Normandy, Then and Now*, by Jean Paul Pallud.

The older version of Squadron Signal's Tiger I book has the above mentioned *Signal Magazine* photos. This is a bit shy and unfortunately, the newer book does not have them.

Uwe Feist's *Tiger* volume has some very interesting material on Wittmann and his mount.



Contact them at Ryton Publications, P.O. Box 2306, Bellingham, WA 98227.

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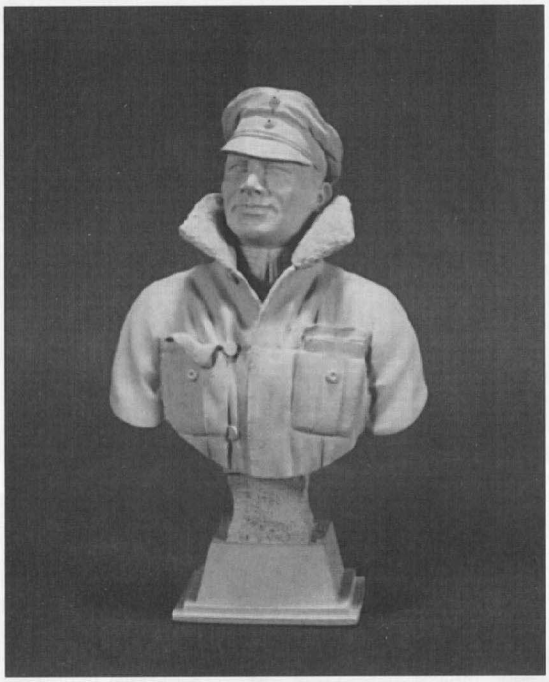


Fokker D, VI & 1/12 Ltn.
Ernst Udet Bust, Jasta 4, 1918
Kit number 5908

DML HAS RELEASED ANOTHER 1/12 SCALE BUST OF A FIRST World War personality, this time Oberleutnant Ernst Udet. Udet began the war as a private in the 26th Wurttemberg Reserve Division as a motorcycle dispatch rider (he provided his own motorcycle!). After breaking his shoulder in an accident while on duty, he was transferred to Munich as a military mail deliverer. Udet transferred to the German Army Air Service in 1915 after paying for private flying lessons. Udet went on to become Germany's second highest scoring fighter pilot, second only to Baron Manfred von Richtofen. Udet was a Luftwaffe General in the Second World War, until taking his own life after Hermann Goring put the blame for the Luftwaffe's failure in the Battle of Britain on Udet's shoulders.

This kit, sculpted by Mike Good, comes in four pieces; pedestal, torso, head, and cap. There are no mold seams to be removed, the only preparation needed is the removal of the excess resin at the mold gates. Unfortunately, the mold gate for the cap is on the top of the cap, but a little careful sanding will take care of this. Some putty was required to fill the gap between the torso and the pedestal. We would suggest gluing the cap to the head, but not gluing the head to the torso until after painting. The figure is depicted with an upturned fur collar and you will have trouble painting the inside of the collar and the rear of the head and cap if glued before painting.

The accuracy of the uniform, what little that shows under the fur lined flying suit, is excellent and depicts Udet wearing the undress feldgrau uniform of the Imperial German Air Service, with "Litzen" (lace) on the collar. The left breast pocket of the flying suit is open with a map stuffed into it. The figure looks like Oberleutnant Udet, unlike many figures of personalities, which might get the uniform correct but don't really look like the person they attempt to depict.

Of course, there is only one drawback: you have to buy a plane to get this bust. We wish they'd offer it separately. Other than that, if you like painting figures of personalities, you can't go wrong with this new release from DML.

The Blanford Press book: *Army Uniforms of World War I*, by Andrew Mollo and Pierre Turner is an excellent reference for any subject from this time period.

Hornet

HORNET MODELS HAS RELEASED TWO NEW HEAD sets in their ever expanding range. If you're in to building figures of any kind, you should check out these products. The complete range of replacement headsets now encompasses nearly twenty products. Each contains five different heads. A range of WWII head gear is represented as are several bare-headed sets.

It's truly amazing how using one of these heads on a plastic figure can really bring it to life. We know quite a few of you out there are bashful when it comes to figure work. Adding a Hornet head can be the first step in setting your work apart from the ordinary.

If you're familiar with the work of Bill Horan, you've seen many of these castings put to excellent use. Most of Mr. Horan's pieces start off with a stock or modified Hornet head.

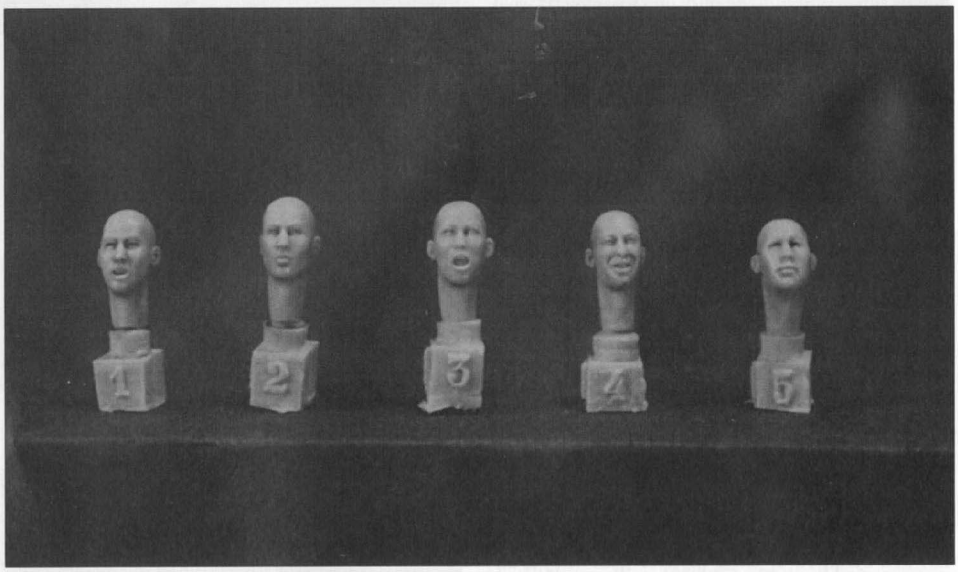
The two latest sets represent more in the series of bare heads that make up about one fifth of the line. The first is a set of East Asian featured heads (HH7) and the second is a set of Caucasian heads (HH6). The quality of the sculpting equals if not surpasses any of the previous sets. The heads in both sets are sculpted bald, which is the current trend from Hornet. Hair can be added with Milliput or another type of putty. If you opt for headgear, the visible part of the scalp can just be painted to represent hair.

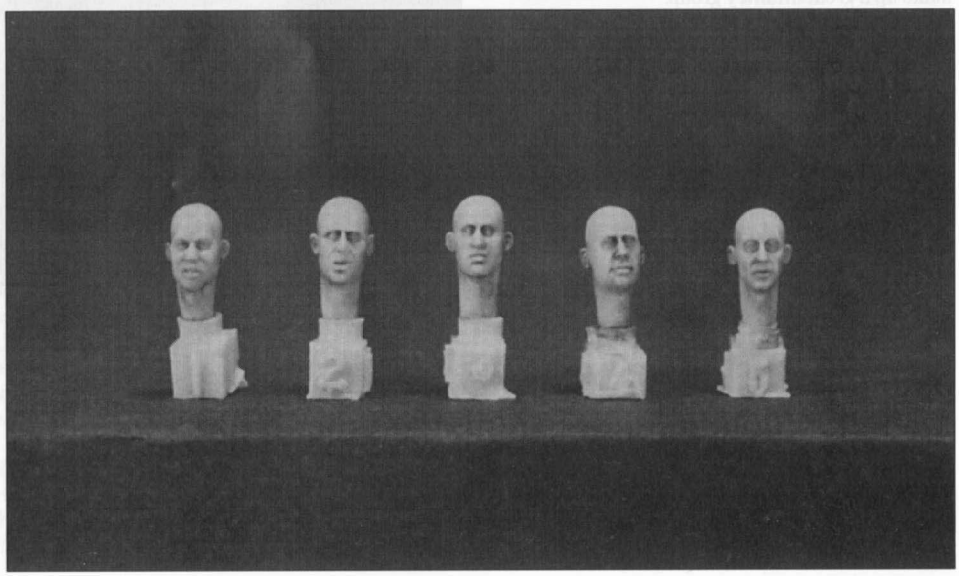
The Caucasian set is the fifth such set, so there's nearly enough to populate a division! In the photo, we've given ours a light wash to highlight the details. They come out of the bag beautifully cast in yellow resin.

The East Asian set is a fascinating choice. There's an interesting variety in their expressions. The timing of this set is particularly good, as we'll be seeing a Japanese infantry set soon from DML. Again, all were perfectly cast, this time in a grayish colored resin.

The Hornet range is available by mail order through The Red Lancers and your favorite hobby shop can purchase stock directly from The Right Stuff Distributors in California (trade only please).

—Complied by Pat Stansell, Ken Dugan and Pete Harlem





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WANTED: Any 1/35th spare parts, figures, accessories, broken kits you no longer want. 1/35th Squadron Combat Line of white metal figures. R.P. Hunnicutt's Pershing. Doug Somers, 417 Harmony Drive, Wheeling IL 60090-6215.

FOR SALE: Tamiya M4A3EZ Jumbo new in the box with Accurate Armor rubber chevron track with the correct grousers, MB Models transmission cover; all for $20.00 plus shipping. Tyresmoke Sherman rubber chevron track kit, unopened, $15.00. Mark Stoeckinger, 18425 Clifftop Way, Malibu, CA 90265.

WANTED: One Heller 1/35th scale Renault R35 tank, unbuilt. Contact John Werner, 1300 Debbie Lane, Macomb, IL 61455.

HERB DEEKS-MODELS, Military Mods, offers high quality kits and conversions, send 2 stamp SASE for list, HERB DEEKS-MODELS, 1516 E. Santa Ana St., Anaheim, CA 92805.

WANTED: military miniature painters, diorama modelers, wargaming and fantasy collectors, etc. in the Ocean County and Monmouth County areas to contact me. Have same interests. James Pierno, 23 Biabou Drive, Toms River, NJ 08757-3734.

FOR SALE: 1/35th Metal Artillery and resin accessories. PAK 38: $25.00. LeFH 18: $45.00. WWII US or German packs 20 pcs: $6.95. Asst. crates 16 pcs: $8.95. For current listing send LSSAE to: Mad Mac's Workshop. P.O. Box 430. Coventry RI 02816-0008.

I am interested in Soviet military vehicles, especially ARV's and transport vehicles. Interested in exchanging all types of documents relating to subject. Please write. Murat Yilmazer P.K.: 366 Kizilay 06423 Ankara/Turkey.

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FOR SALE: Model Kasten M002 StuG III Steel Return Rollers #1; M003 StuG III Steel Return Rollers #2; M004 Panzer III Road Wheels: all three sets for $25 (half price!) plus postage: also discontinued Verlinden items, send 32-cent stamp for list. J.H. Randolph, 18425 Boone Road, Columbia Station, Ohio 44028.

WANTED: Correspondence with Modelers of WWI Armor. Contact: John Ketterman 913 Grand St., Fulton, MO 65251. 314-642-6671 After 5PM.

WANTED: ESCI 1/9 scale model kits, BMW R-75; Zundapp KS-750; VW TYP82 Kubelwagen; Triumph 3HW Solo. Call or write: R. Pedersen, Box 604 Dalton, GA 30722 (706) 275-6121.

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FOR SALE: MB Panzer III G–$70; Azimut Panzer-Werfer 42–$90; SdKfz 234/1 20mm turret–$30; Panzer IV J conversion–$30; Airmodel 105cm artillery (for Panzer II WASP)–$35; Modelkasten tracks Panzer I, Panzer III/IV and Panzer IV final production–$25 each; Gunze Sanyo Hi-Tech Panther G–$65; Heller Hotchkiss and Renault–$25 each; DML Typhoon sub–$15; Hummel–$25; ESCI SdKfz 10/4 20mm AA–$15; Italeri Chaffee–$15; M40 Italian SP–$15; Nichimo Elefant–$15; Tamiya Jagdpanzer IV Lang–$15; Kettenkraftrad–$15; Ford Mutt–$10; Stuart–$20; Jap 97 Chiha–$15; Su-85–$15; M2A2 Bradley–$25; Marine AAVP 7A1–$25; SdKfz 251/1 Stuka Zu Fuss–$25; Patton–$15 and more Tamiya, call! Mike Fredericks, 145 Bayline Cir., Folsom, CA. 95630-8077 (916) 985-7986.

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WANTED: The following kits in 1/35. Tamiya's Horse Drawn German Field Kitchen. Tamiya's Mounted German Infantry. ESCI's Horse Drawn German Supply Wagon. Will pay for complete, unassembled kits—will consider semi-assembled. Steve Parker, 16418 Sky Blue Lane, Houston, TX. 77095.

FOR SALE: Limited number of Sherman Tank T-Shirts M, L, XL, $5.00 + S/H, $2.50. Send $7.50 to Joe Yukna, 22 Park Place Way, Mashpee, MA 02649.

WANTED: Ballantine Illustrated History of WW2 paperbacks, particularly Destruction of Army Group Center and Carpathian Disaster. Tom Kanyak. 126 East Bennet St., Kingston PA 18704. (717) 283-1019.

WANTED: Osprey Vanguard #12, Panzerjager and Sturmartillerie in good to very good condition. Possible trade for Vanguard #4; Fallschirmpanzerdivision "Herman Goring," the book is in very good condition. Will also pay reasonable price. Joe Rundell (303) 680-6583.

WANTED: the first 10 issues of the AMM review (issues 1-10). Please send information on price and condition to David Dees, 4504 E. Emort Road, Knoxville, TN 37938-3701.

WISH TO PURCHASE Roskopf HO plastic Soviet & WWII German armor. Please write Christopher Gill, 580 W. Lewiston, Ferndale, MI 48220-1204.

WANTED: 1/72 scale (25mm) Italian WWII soldiers, armor, other vehicles and equipment. Also books on the Italian Army in the Western Desert and North Africa. Ken Moore, 851 Sheffield Road, Sheffield Lake, OH 44054.

WANTED: Tamiya 1/35th scale JSIII, built or unbuilt, must be complete. Contact Bill Vanek 10731 S. Lavergne, Oak Lawn, IL 60453.

WANTED: Issues 1-18 AMM Review. Photo copies will suffice. Will pay all copy and postage costs. Also looking for a copy of Model Art Magazine Special T-34, KV and the Almark book on the Panzer 1 & 2. Russell J. Hammond, 32533 Warren Rd., Garden City, MI 48135.

BID SALE: One mint copy of Hunnicutt's "Pershing" book. Starting bids at $135.00. I reserve the right to refuse any and all bids. Contact David Marks, 254 fallen leaf Dr., Vacaville, CA 95687, 707-451-8266.

WANTED: Information about the interior of the SdKfz 250/8. Photos & drawings, especially useful. Willing to pay for copies and shipping. Bill Rimm, 1228 Bannister Circle, Waldorf, Maryland 20602.

WANTED: FINE SCALE MODELER back issues to buy or trade for same: Spring '82, Summer '83, Jan/Feb '84. MILITARY MINIATURES IN REVIEW: Pilot Issue. PLANS/PHOTOS: Sonder Anhanger (special trailer) 57 for Sd Kfz 7/2. T-60 Soviet light tank mounting Katyusha launcher. G. Hill, 5301 K Street, Sacramento, C 95819 (916) 457-1470.

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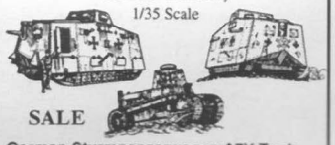

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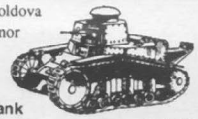

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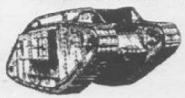

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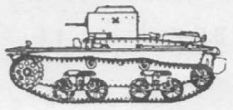

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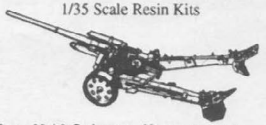

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